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Barnes

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(45) **Date of Patent: Dec. 25, 2018**

(54) **ABSORBENT ARTICLE WITH PARTIALLY ENCLOSED WAIST CONTAINMENT MEMBER AND METHOD OF MANUFACTURING THEREOF**

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CPC ***A61F 13/53*** (2013.01); ***A61F 13/15585*** (2013.01); ***A61F 13/15747*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC A61F 13/15747; A61F 13/49001; A61F 13/49011; A61F 13/496; A61F 2013/49092
See application file for complete search history.

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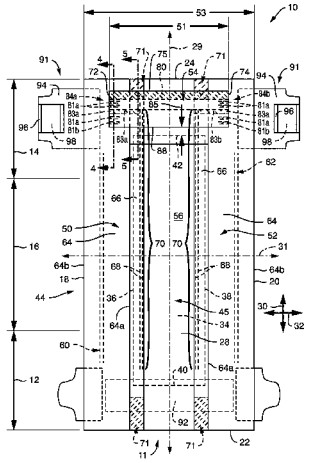
(57) **ABSTRACT**

An absorbent article (**10**, **110**) can include a waist containment member (**54**) with a first longitudinal side edge (**72**), a second longitudinal side edge (**74**), a proximal portion (**76**), an intermediate portion (**77**), and a distal portion (**78**). The proximal portion (**76**) can be coupled to the chassis (**11**) of the absorbent article (**10**, **110**). The intermediate portion (**77**) can be free to move independent of the proximal portion (**76**) and the distal portion (**78**) and free to move independent of the body facing surface (**19**) of the chassis (**11**) to provide a containment pocket (**82**) for containing body exudates. The distal portion (**78**) can be disposed underneath the intermediate portion (**77**) when the absorbent article (**10**, **110**) is in the stretched, laid-flat configuration. The waist containment member (**54**) can also include a first lateral tack-down region (**83***a*) and a second lateral tack-down region (**83***b*).

14 Claims, 10 Drawing Sheets



(51) **Int. Cl.**

A61F 13/53	(2006.01)
A61F 13/49	(2006.01)
A61F 13/494	(2006.01)
A61F 13/496	(2006.01)

(52) **U.S. Cl.**

CPC .. ***A61F 13/15804*** (2013.01); ***A61F 13/49001*** (2013.01); ***A61F 13/496*** (2013.01); ***A61F 13/49011*** (2013.01); ***A61F 13/4942*** (2013.01); *A61F 2013/49092* (2013.01); *A61F 2013/530481* (2013.01)

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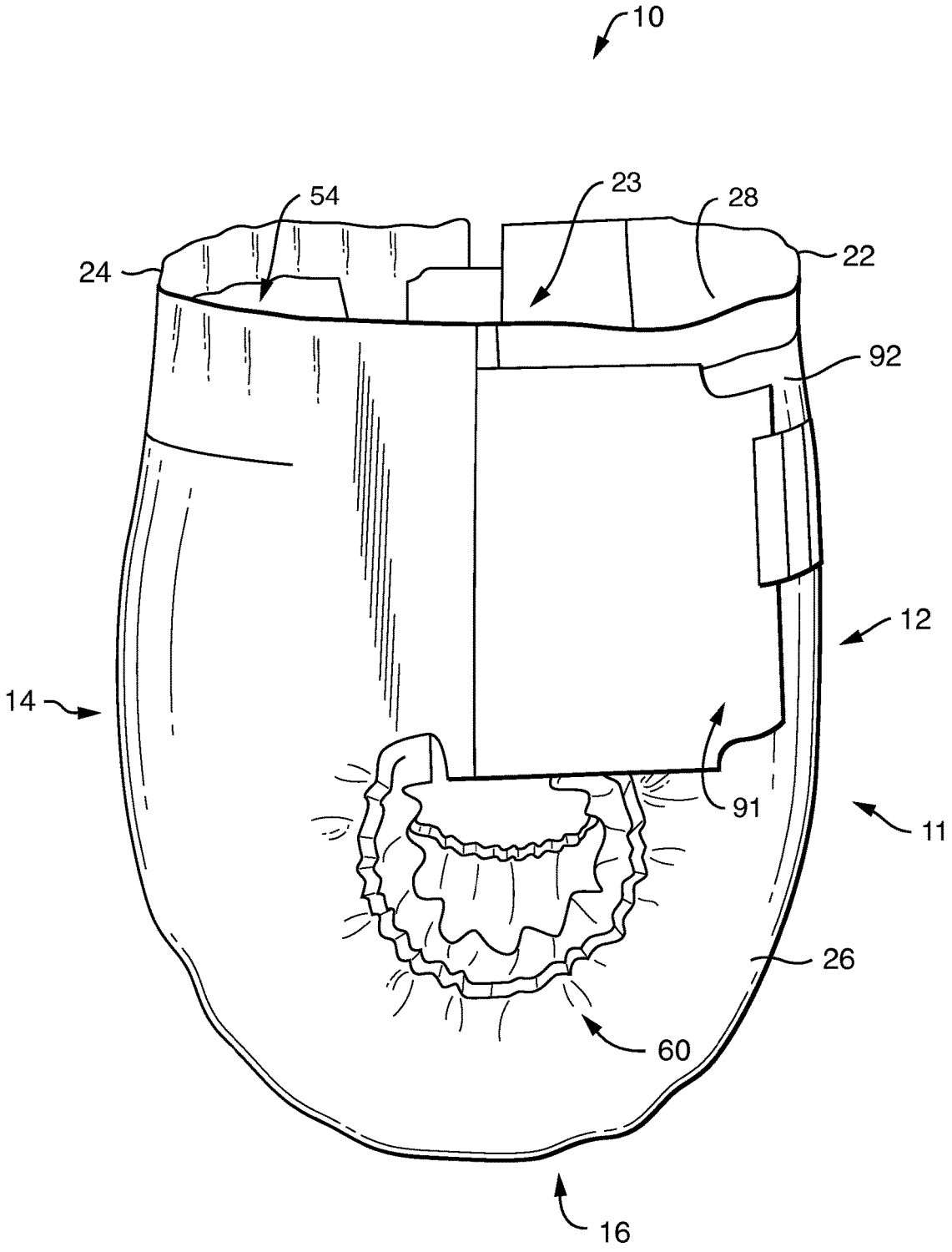
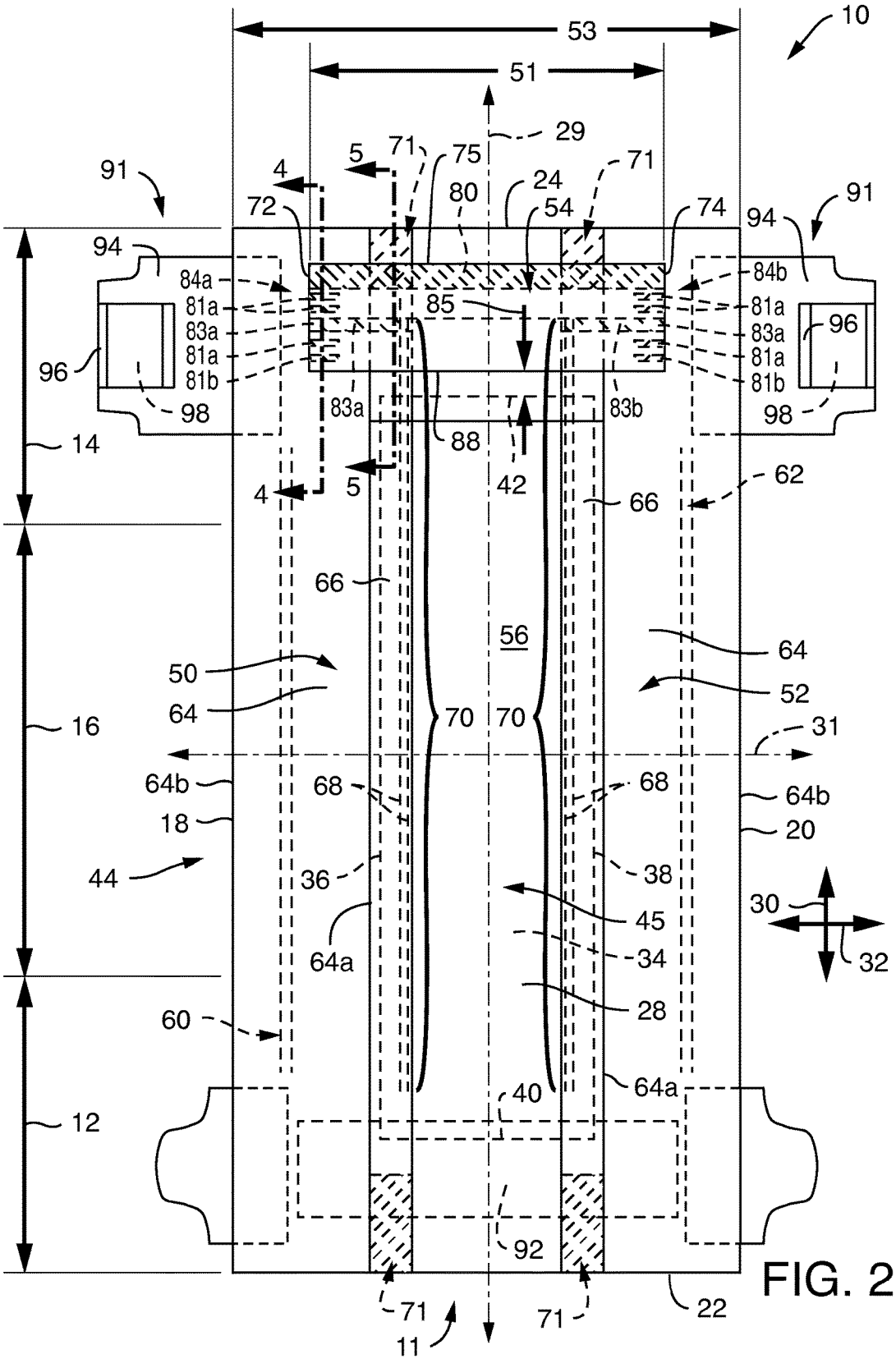


FIG. 1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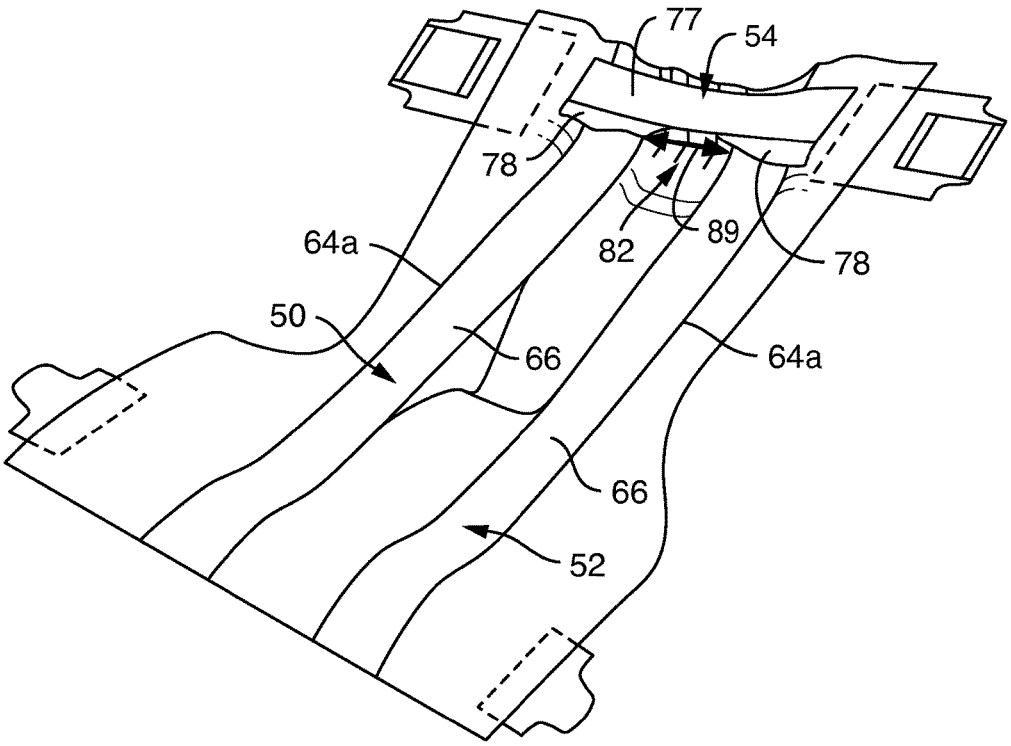
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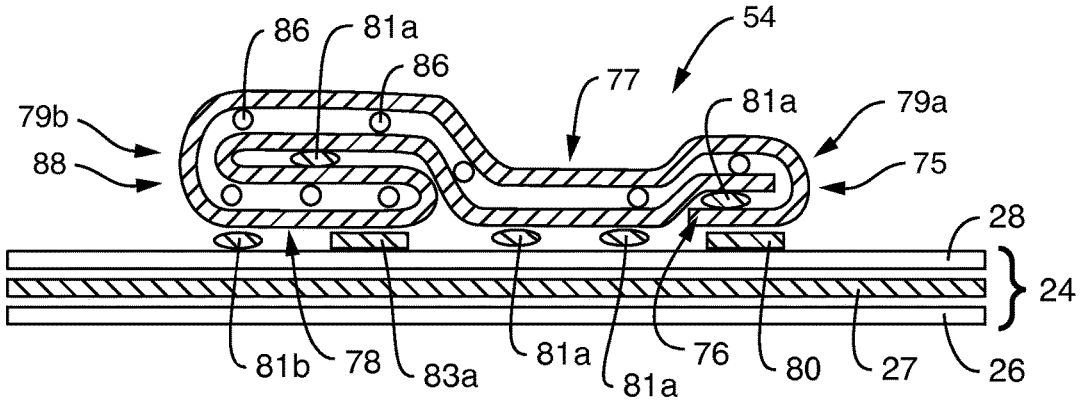
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FIG. 4

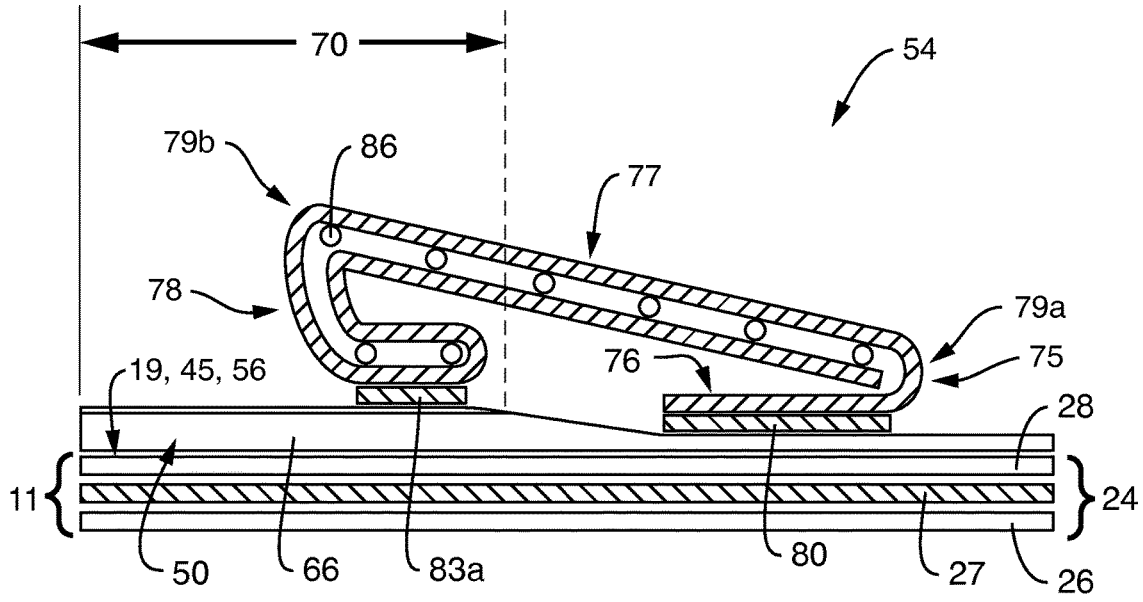
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FIG. 5A

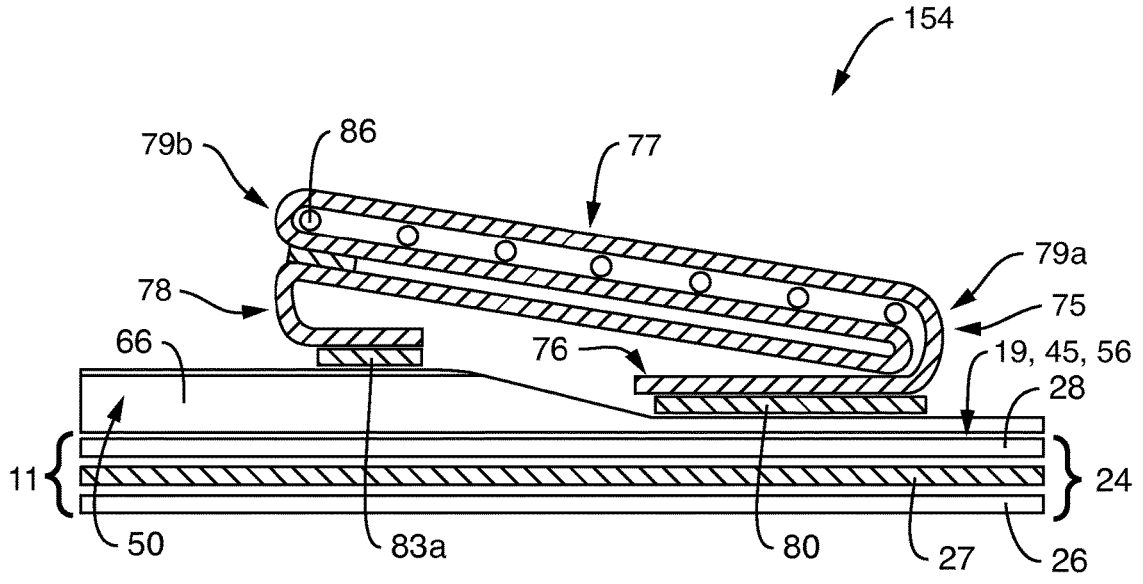
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FIG. 5B

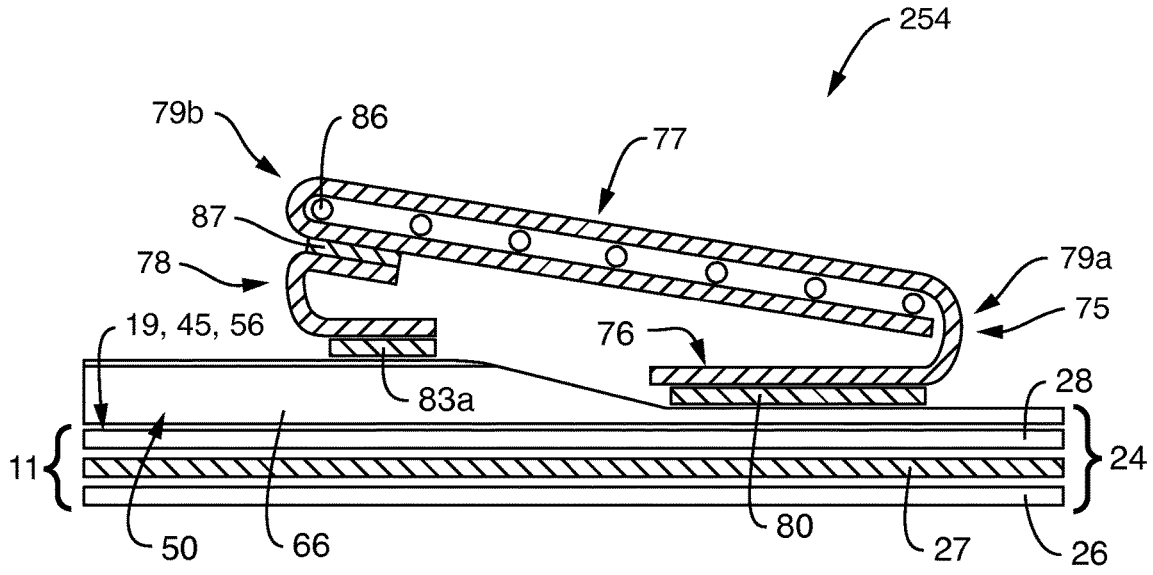
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FIG. 5C

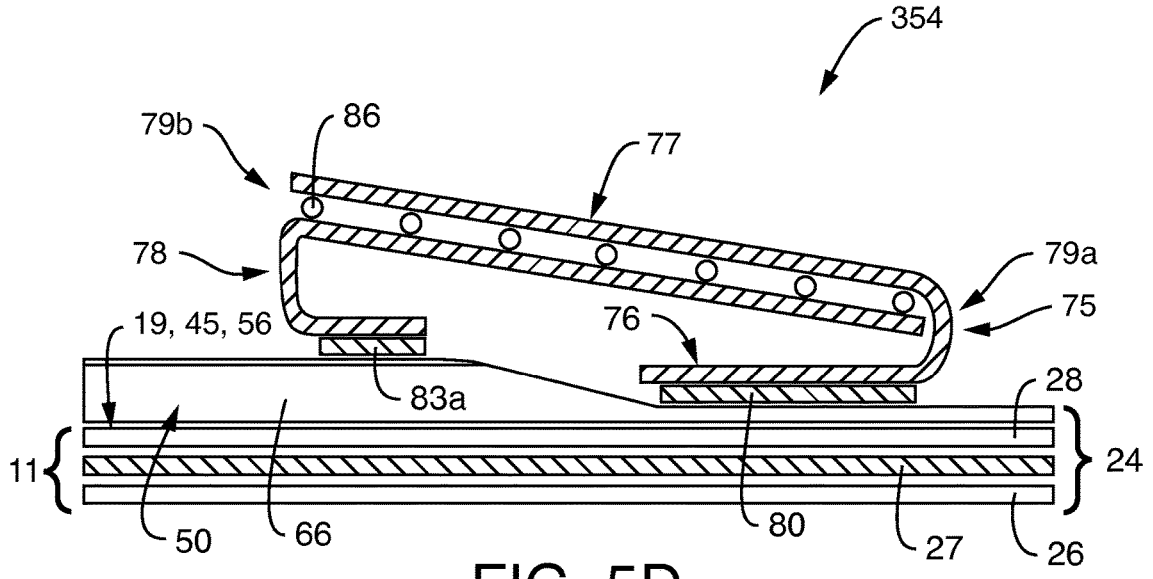
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FIG. 5D

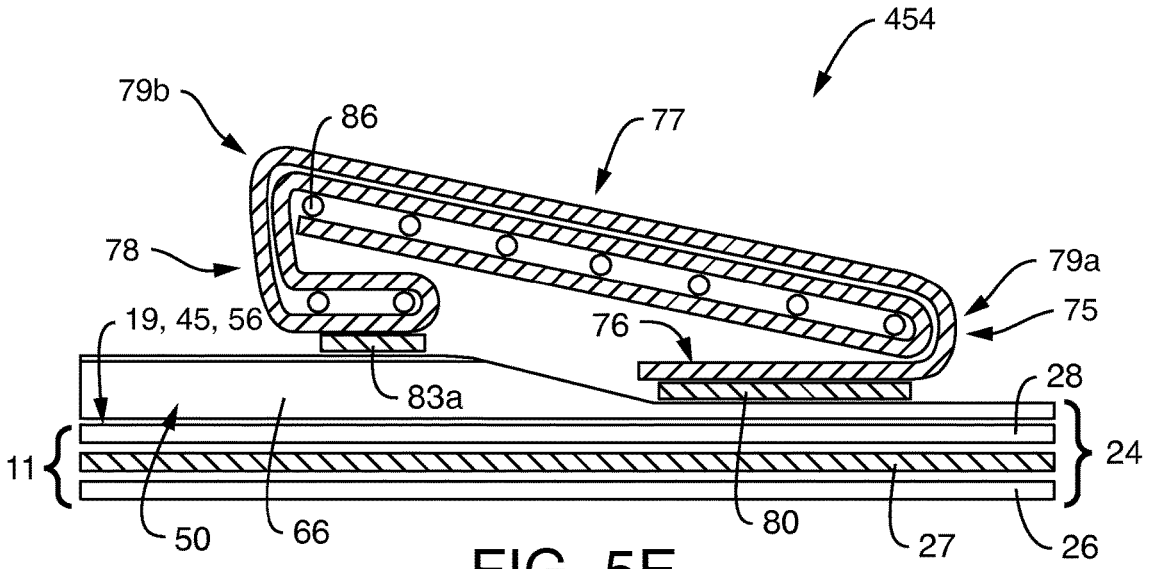
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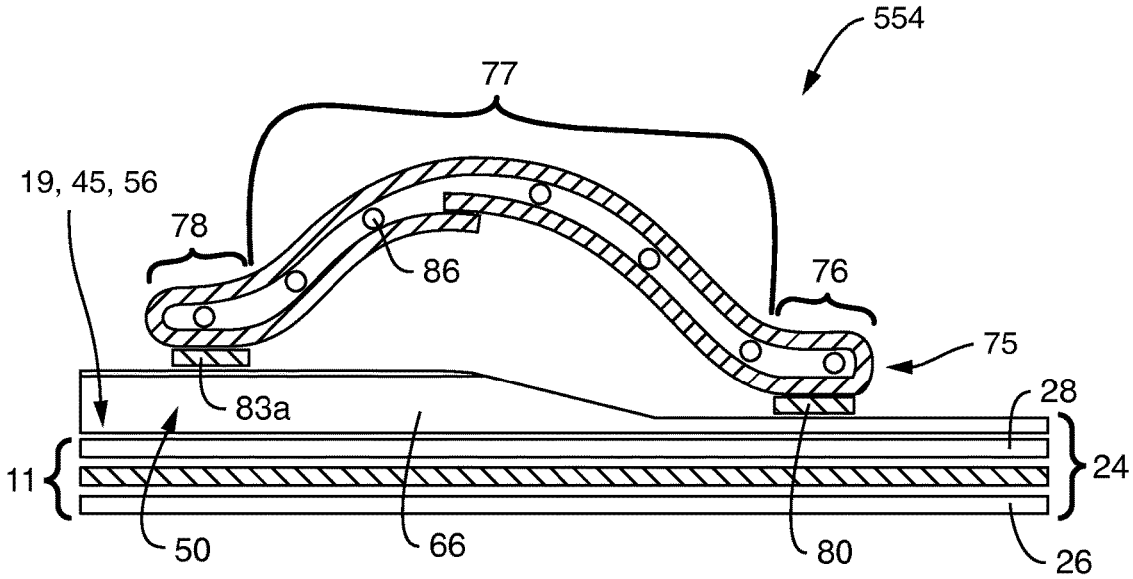
FIG. 5E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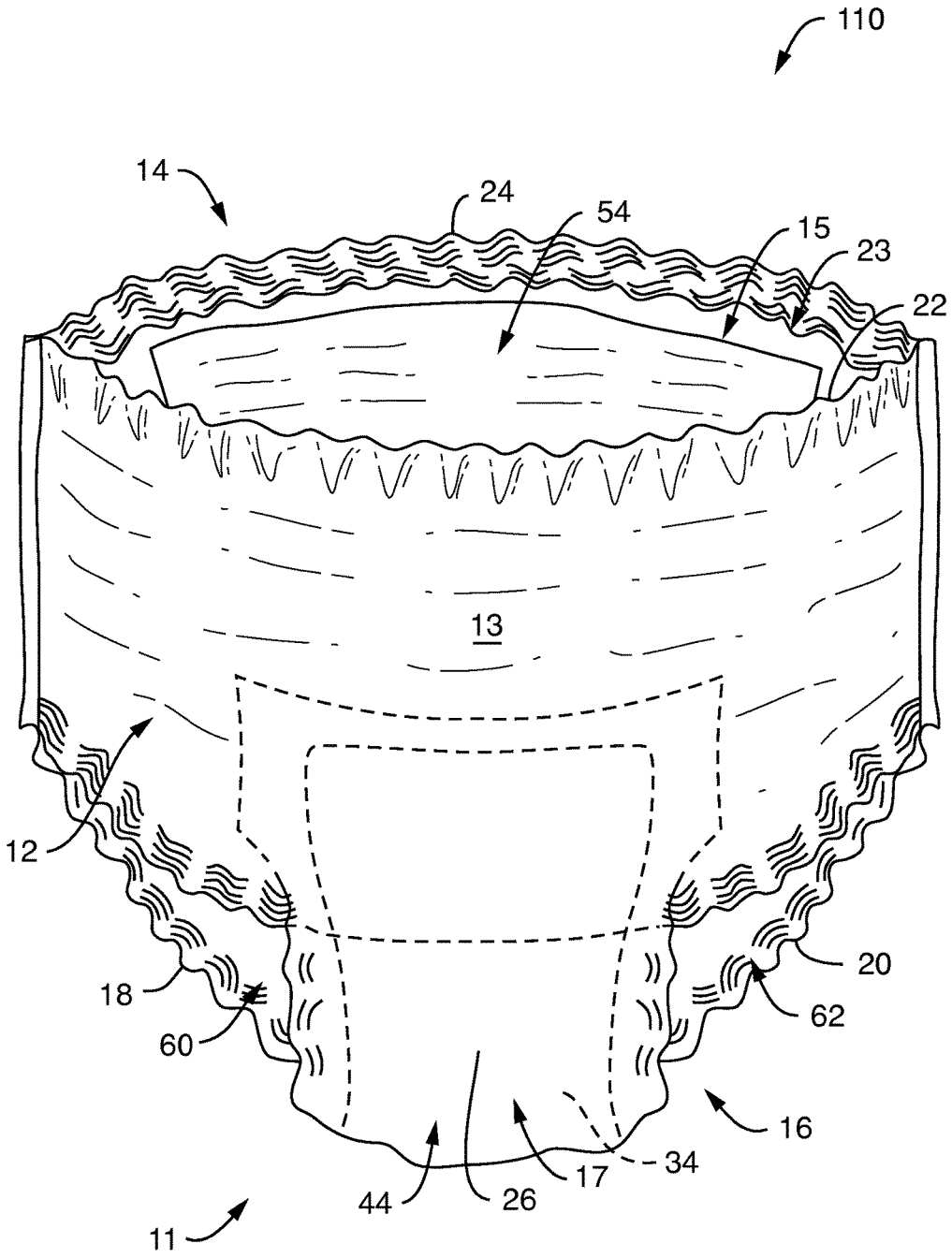

FIG. 6

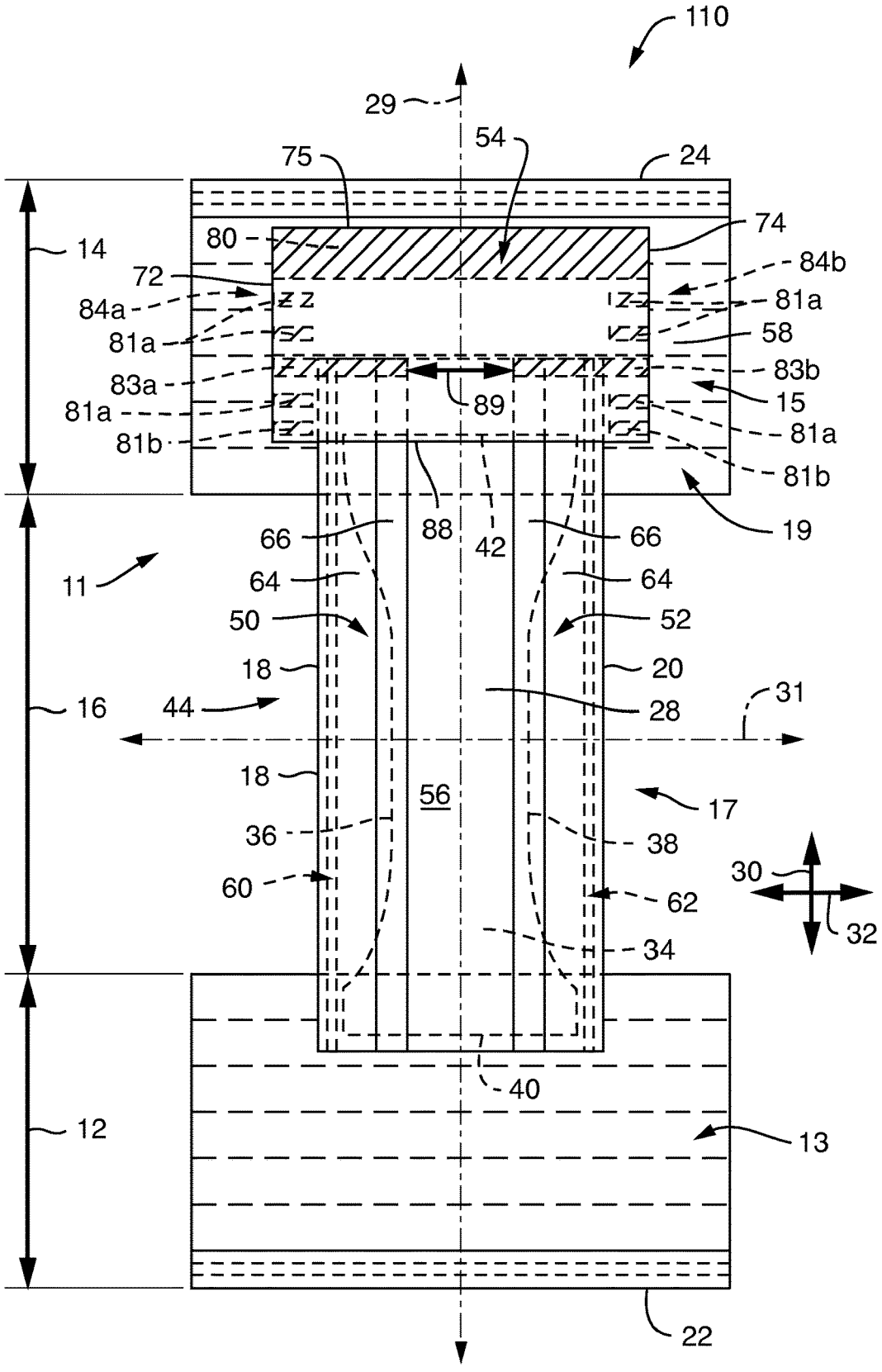
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FIG. 7

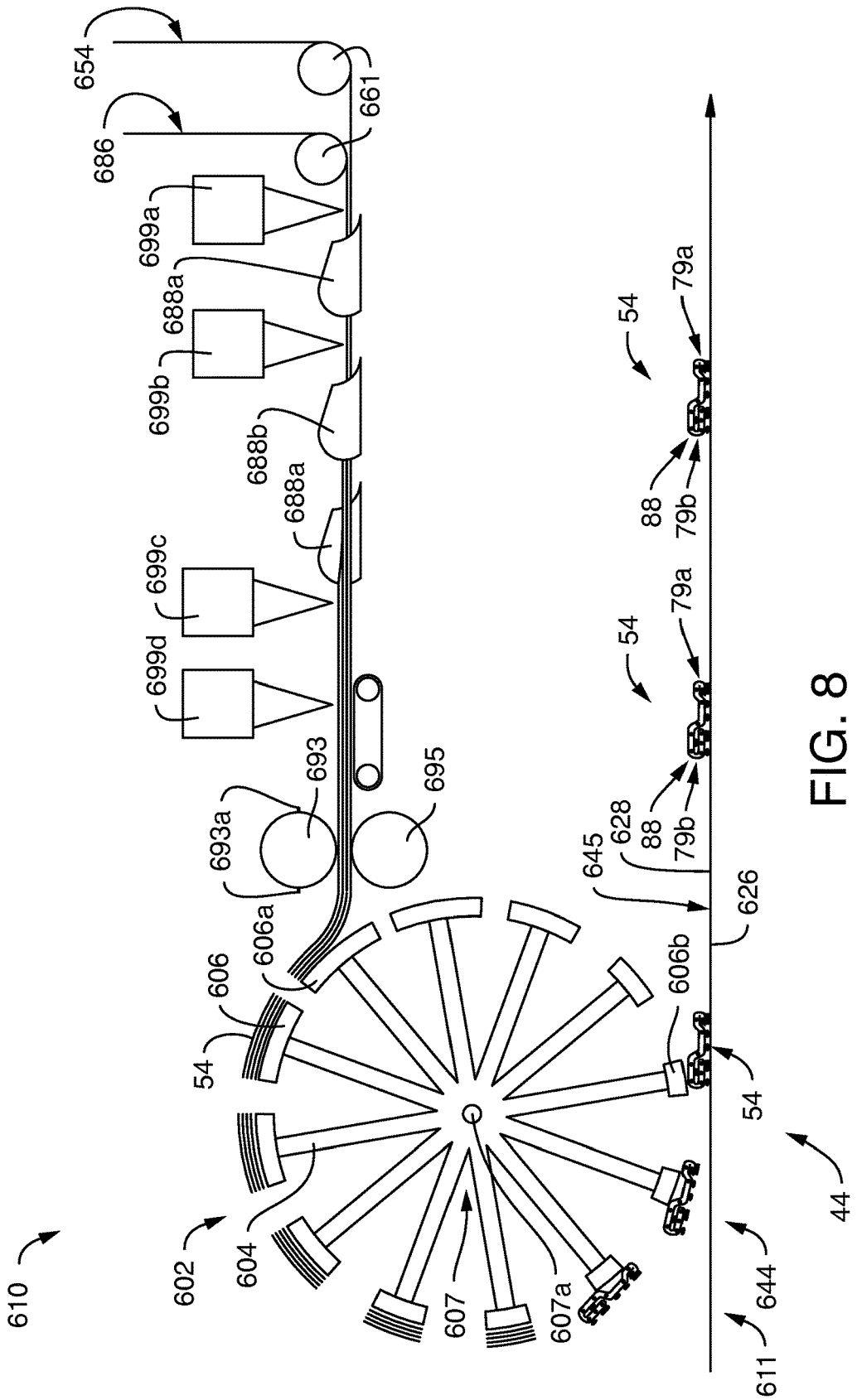
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FIG. 8

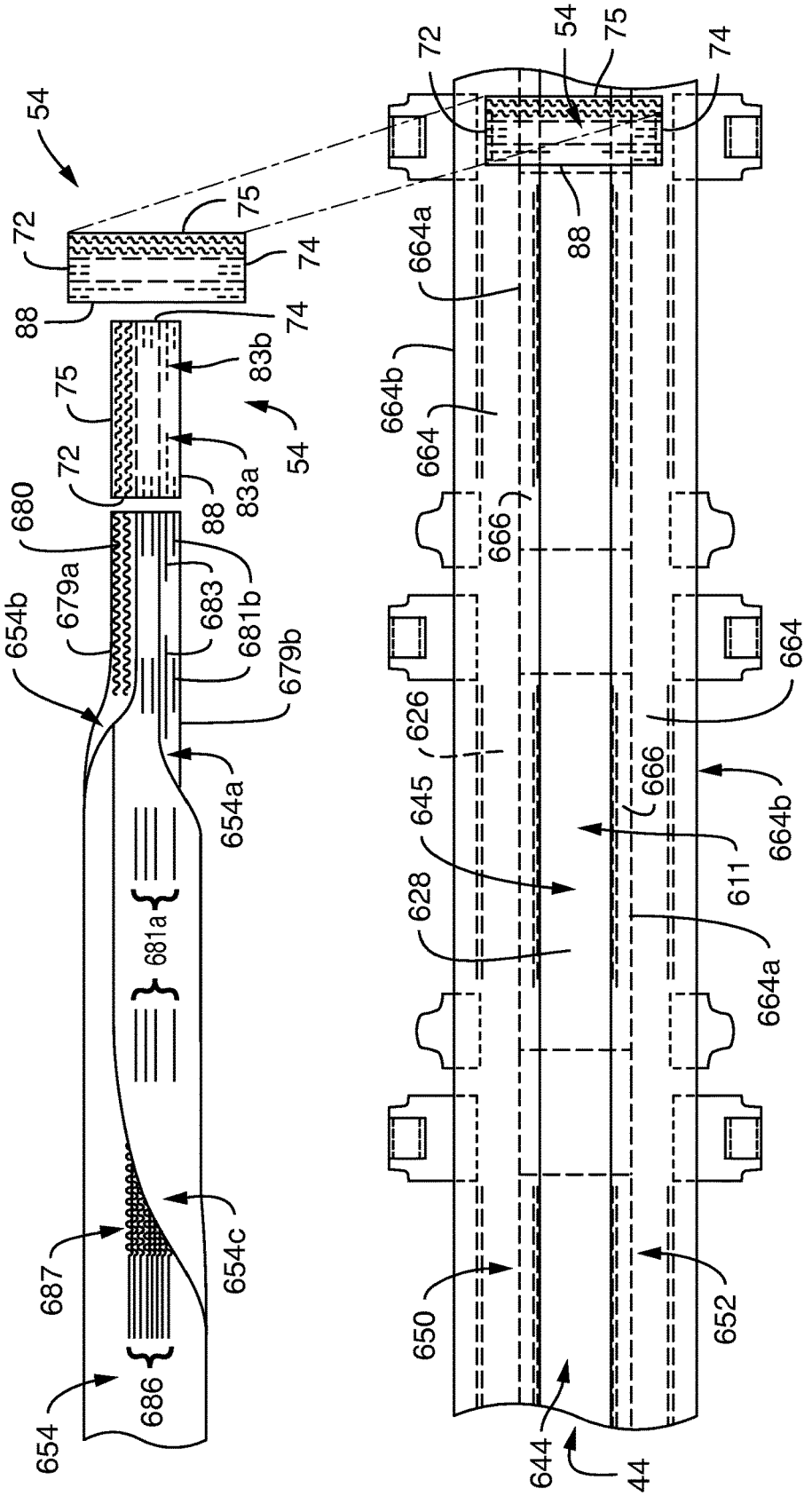
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FIG. 9

ABSORBENT ARTICLE WITH PARTIALLY ENCLOSED WAIST CONTAINMENT MEMBER AND METHOD OF MANUFACTURING THEREOF

TECHNICAL FIELD

The present disclosure relates to absorbent articles.

BACKGROUND OF THE DISCLOSURE

A primary function of personal care absorbent articles is to absorb and retain body exudates such as urine, fecal material, blood, and menses with additional desired attributes including low leakage of the exudates from the absorbent article and a dry feel to the wearer of the absorbent article. By preventing leakage of the exudates from the absorbent article, the absorbent article intends to prevent the body exudates from soiling or contaminating a wearer's or caregiver's clothing or other articles, such as bedding, that can come in contact with the wearer.

One common mode of failure is for exudates to leak out of the rear waist region or the front waist region of an absorbent article. As one example, fecal material that is not absorbed or contained by the absorbent article can move past the gaps between the absorbent article and the wearer's skin in the rear waist region and soil or contaminate the wearer's skin and clothing near their back. This may be more common of an occurrence for semi-solid fecal material, such as low viscosity fecal material, which can be prevalent with younger children. Such exudates can move around on the bodyside liner of an absorbent article under the influence of gravity, motion, force, and pressure by the wearer of the absorbent article. In such a circumstance, not only does the wearer's absorbent article need to be changed, but the wearer's clothing and/or bedding often also needs to be changed, resulting in additional work, expense, and stress for the caregiver.

Attempts have been made in the past to provide containment systems, especially on the bodyside liner or near the rear waist region to solve the problems described above. One example is by providing a waist elastic member and not adhering a portion of the waist containment member closest to the lateral axis of the absorbent article to the bodyside liner, such that the non-adhered portion of the waist elastic member can provide a containment pocket for exudates. One example of this configuration is a HUGGIES® Little Snugglers diaper. Although absorbent articles with such containment members intend to prevent leakage of exudates and have functioned adequately, failures can still occur.

Thus, there is a desire for improvements to containment systems and containment members of absorbent articles to prevent leakage of exudates, especially in the waist regions of the absorbent article. There is also a desire for improvements in containment systems to have increased void volumes to hold body exudates until the absorbent article can be changed.

SUMMARY OF THE DISCLOSURE

In one embodiment, an absorbent article can include a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis. The absorbent article can include a chassis including an absorbent body. The chassis can include a body facing surface and a garment facing surface. The absorbent article can also include a waist containment member disposed on the body facing surface of the chassis. The waist containment member can include a first longitudinal side edge and a second longitudinal side edge. The first longitudinal side edge can be disposed on a first side of the longitudinal axis and the second longitudinal edge can be disposed on a second side of the longitudinal axis. The waist containment member can further include an upper lateral edge and a lower lateral edge. The first longitudinal side edge, the second longitudinal side edge, the upper lateral edge, and the lower lateral edge of the waist containment member can be defined when the absorbent article is in a stretched laid-flat configuration. The waist containment member can also include a proximal portion that can be coupled to the body facing surface of the chassis. The waist containment member can further include a distal portion and an intermediate portion. The intermediate portion can be disposed between the proximal portion and the distal portion. The intermediate portion can be free to move independent of the proximal portion and the distal portion and can be free to move independent of the body facing surface of the chassis to provide a containment pocket for containing body exudates. The distal portion can be disposed underneath the intermediate portion when the absorbent article is in the stretched laid-flat configuration.

In another embodiment, an absorbent article can include a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis. The absorbent article can include a chassis including an absorbent body. The chassis can include a body facing surface and a garment facing surface. The absorbent article can also include a waist containment member disposed on the body facing surface of the chassis. The waist containment member can include a first longitudinal side edge and a second longitudinal side edge. The first longitudinal side edge can be disposed on a first side of the longitudinal axis and the second longitudinal edge can be disposed on a second side of the longitudinal axis. The waist containment member can further include an upper lateral edge and a lower lateral edge. The first longitudinal side edge, the second longitudinal side edge, the upper lateral edge, and the lower lateral edge of the waist containment member can be defined when the absorbent article is in a stretched laid-flat configuration. The waist containment member can also include a proximal portion that can be coupled to the body facing surface of the chassis. The waist containment member can further include a distal portion. The waist containment member can additionally include a first lateral tack-down region and a second lateral tack-down region. The first lateral tack-down region can include the distal portion of the waist containment member on the first side of the longitudinal axis being coupled to the body facing surface of the chassis from the first longitudinal side edge in a lateral direction towards the proximal end of the base portion of the first containment flap. The second lateral tack-down region can include the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge in a lateral direction towards the proximal end of the base portion of the second containment flap. The waist containment member can be gathered in the longitudinal direction such that the waist containment member can extend away from the body facing surface of the chassis to provide a containment pocket for containing exudates between the first lateral tack-down region and the upper lateral edge of the waist containment member and between the second lateral tack-down region and the upper lateral edge of the waist containment member.

In yet another embodiment, a method of manufacturing an absorbent article is provided. The absorbent article can

include a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis. The method can include providing a chassis including a body facing surface. The chassis can include an absorbent assembly including a bodyside liner, an outer cover, and an absorbent body disposed between the bodyside liner and the outer cover. The absorbent assembly can include a body facing surface. The method can further include providing a continuous web of waist containment member material. The method can also include folding at least a first portion of the continuous web of waist containment member material upon itself to provide a folded edge. The method can additionally include cutting the continuous web of waist containment member material to provide a waist containment member including a proximal portion, an intermediate portion, a distal portion, a first longitudinal side edge, a second longitudinal side edge, an upper lateral edge, and a lower lateral edge. The folded edge can provide the distal portion to be folded against the intermediate portion and can define the lower lateral edge of the waist containment member. The intermediate portion can be disposed between the proximal portion and the distal portion. The method can also include bonding the proximal portion of the waist containment member to the body facing surface of the chassis. The method can include bonding the distal portion of the waist containment member to the body facing surface of the chassis to provide a first lateral tack-down region near the first longitudinal side edge of the waist containment member and a second lateral tack-down region near the second longitudinal side edge of the waist containment member. The first lateral tack-down region and the second lateral tack-down region can be formed such that the first lateral tack-down region and the second lateral tack-down region of the waist containment member are disposed away from the lower lateral edge of the waist containment member when the absorbent article is in the stretched laid-flat configuration.

BRIEF DESCRIPTION OF DRAWINGS

A full and enabling disclosure thereof, directed to one of ordinary skill in the art, is set forth more particularly in the remainder of the specification, which makes reference to the appended figures in which:

FIG. **1** is side perspective view of an exemplary embodiment of an absorbent article, such as a diaper, in a fastened condition.

FIG. **2** is a top plan view of the absorbent article of FIG. **1** in a stretched, laid flat, unfastened condition.

FIG. **3** is a top perspective view of the absorbent article of FIG. **2** in an unfastened, relaxed condition.

FIG. **4** is a cross-sectional view taken along line **4-4** from FIG. **2**.

FIG. **5**A is a cross-sectional view taken along line **5-5** from FIG. **2**, but with the waist containment member being shown in a relaxed configuration such that the waist containment member can provide void volume for exudates.

FIG. **5**B is a cross-sectional view similar to FIG. **5**A, but of an alternative embodiment of a waist containment member.

FIG. **5**C is a cross-sectional view similar to FIG. **5**A, but of an alternative embodiment of a waist containment member.

FIG. **5**D is a cross-sectional view similar to FIG. **5**A, but of an alternative embodiment of a waist containment member.

FIG. **5**E is a cross-sectional view similar to FIG. **5**A, but of an alternative embodiment of a waist containment member.

FIG. **5**F is a cross-sectional view similar to FIG. **5**A, but of an alternative embodiment of a waist containment member.

FIG. **6** is a front perspective view of an alternative embodiment of an absorbent article, such as a pant.

FIG. **7** is a top plan view of the absorbent article of FIG. **6** in a stretched, laid flat condition.

FIG. **8** is a process schematic depicting an exemplary embodiment of a method of manufacturing an absorbent article including a waist containment member.

FIG. **9** is a process schematic depicting some of the steps of forming the waist containment member of the method depicted in FIG. **8**.

Repeat use of reference characters in the present specification and drawings is intended to represent the same or analogous features or elements of the disclosure.

DETAILED DESCRIPTION OF THE DISCLOSURE

In an embodiment, the present disclosure is generally directed towards an absorbent article **10**, **110** having a waist containment member **54**, **154**, **254**, **354**, **454**, **554** providing volume for exudates and a method of manufacturing **610** thereof. Each example is provided by way of explanation and is not meant as a limitation. For example, features illustrated or described as part of one embodiment or figure can be used on another embodiment or figure to yield yet another embodiment. It is intended that the present disclosure include such modifications and variations.

When introducing elements of the present disclosure or the preferred embodiment(s) thereof, the articles "a", "an", "the" and "said" are intended to mean that there are one or more of the elements. The terms "comprising", "including" and "having" are intended to be inclusive and mean that there may be additional elements other than the listed elements. Many modifications and variations of the present disclosure can be made without departing from the spirit and scope thereof. Therefore, the exemplary embodiments described above should not be used to limit the scope of the invention.

Definitions

The term "absorbent article" refers herein to an article which may be placed against or in proximity to the body (i.e., contiguous with the body) of the wearer to absorb and contain various liquid, solid, and semi-solid exudates discharged from the body. Such absorbent articles, as described herein, are intended to be discarded after a limited period of use instead of being laundered or otherwise restored for reuse. It is to be understood that the present disclosure is applicable to various disposable absorbent articles, including, but not limited to, diapers, diaper pants, training pants, youth pants, swim pants, feminine hygiene products, including, but not limited to, menstrual pads or pants, incontinence products, medical garments, surgical pads and bandages, other personal care or health care garments, and the like without departing from the scope of the present disclosure.

The term "acquisition layer" refers herein to a layer capable of accepting and temporarily holding liquid body exudates to decelerate and diffuse a surge or gush of the

liquid body exudates and to subsequently release the liquid body exudates therefrom into another layer or layers of the absorbent article.

The term "bonded" or "coupled" refers herein to the joining, adhering, connecting, attaching, or the like, of two elements. Two elements will be considered bonded or coupled together when they are joined, adhered, connected, attached, or the like, directly to one another or indirectly to one another, such as when each is directly bonded to intermediate elements. The bonding or coupling of one element to another can occur via continuous or intermittent bonds.

The term "carded web" refers herein to a web containing natural or synthetic staple length fibers typically having fiber lengths less than about 100 mm. Bales of staple fibers can undergo an opening process to separate the fibers which are then sent to a carding process which separates and combs the fibers to align them in the machine direction after which the fibers are deposited onto a moving wire for further processing. Such webs are usually subjected to some type of bonding process such as thermal bonding using heat and/or pressure. In addition to or in lieu thereof, the fibers may be subject to adhesive processes to bind the fibers together such as by the use of powder adhesives. The carded web may be subjected to fluid entangling, such as hydroentangling, to further intertwine the fibers and thereby improve the integrity of the carded web. Carded webs, due to the fiber alignment in the machine direction, once bonded, will typically have more machine direction strength than cross machine direction strength.

The term "film" refers herein to a thermoplastic film made using an extrusion and/or forming process, such as a cast film or blown film extrusion process. The term includes apertured films, slit films, and other porous films which constitute liquid transfer films, as well as films which do not transfer fluids, such as, but not limited to, barrier films, filled films, breathable films, and oriented films.

The term "gsm" refers herein to grams per square meter.

The term "hydrophilic" refers herein to fibers or the surfaces of fibers which are wetted by aqueous liquids in contact with the fibers. The degree of wetting of the materials can, in turn, be described in terms of the contact angles and the surface tensions of the liquids and materials involved. Equipment and techniques suitable for measuring the wettability of particular fiber materials or blends of fiber materials can be provided by Cahn SFA-222 Surface Force Analyzer System, or a substantially equivalent system. When measured with this system, fibers having contact angles less than 90 are designated "wettable" or hydrophilic, and fibers having contact angles greater than 90 are designated "nonwettable" or hydrophobic.

The term "liquid impermeable" refers herein to a layer or multi-layer laminate in which liquid body exudates, such as urine, will not pass through the layer or laminate, under ordinary use conditions, in a direction generally perpendicular to the plane of the layer or laminate at the point of liquid contact.

The term "liquid permeable" refers herein to any material that is not liquid impermeable.

The term "meltblown" refers herein to fibers formed by extruding a molten thermoplastic material through a plurality of fine, usually circular, die capillaries as molten threads or filaments into converging high velocity heated gas (e.g., air) streams which attenuate the filaments of molten thermoplastic material to reduce their diameter, which can be a microfiber diameter. Thereafter, the meltblown fibers are carried by the high velocity gas stream and are deposited on a collecting surface to form a web of randomly dispersed meltblown fibers. Such a process is disclosed, for example, in U.S. Pat. No. 3,849,241 to Butin et al., which is incorporated herein by reference. Meltblown fibers are microfibers which may be continuous or discontinuous, are generally smaller than about 0.6 denier, and may be tacky and self-bonding when deposited onto a collecting surface.

The term "nonwoven" refers herein to materials and webs of material which are formed without the aid of a textile weaving or knitting process. The materials and webs of materials can have a structure of individual fibers, filaments, or threads (collectively referred to as "fibers") which can be interlaid, but not in an identifiable manner as in a knitted fabric. Nonwoven materials or webs can be formed from many processes such as, but not limited to, meltblowing processes, spunbonding processes, carded web processes, etc.

The term "pliable" refers herein to materials which are compliant and which will readily conform to the general shape and contours of the wearer's body.

The term "spunbond" refers herein to small diameter fibers which are formed by extruding molten thermoplastic material as filaments from a plurality of fine capillaries of a spinnerette having a circular or other configuration, with the diameter of the extruded filaments then being rapidly reduced by a conventional process such as, for example, eductive drawing, and processes that are described in U.S. Pat. No. 4,340,563 to Appel et al., U.S. Pat. No. 3,692,618 to Dorschner et al., U.S. Pat. No. 3,802,817 to Matsuki et al., U.S. Pat. Nos. 3,338,992 and 3,341,394 to Kinney, U.S. Pat. No. 3,502,763 to Hartmann, U.S. Pat. No. 3,502,538 to Peterson, and U.S. Pat. No. 3,542,615 to Dobo et al., each of which is incorporated herein in its entirety by reference. Spunbond fibers are generally continuous and often have average deniers larger than about 0.3, and in an embodiment, between about 0.6, 5 and 10 and about 15, 20 and 40. Spunbond fibers are generally not tacky when they are deposited on a collecting surface.

The term "superabsorbent" refers herein to a water-swellable, water-insoluble organic or inorganic material capable, under the most favorable conditions, of absorbing at least about 15 times its weight and, in an embodiment, at least about 30 times its weight, in an aqueous solution containing 0.9 weight percent sodium chloride. The superabsorbent materials can be natural, synthetic and modified natural polymers and materials. In addition, the superabsorbent materials can be inorganic materials, such as silica gels, or organic compounds, such as cross-linked polymers.

The term "thermoplastic" refers herein to a material which softens and which can be shaped when exposed to heat and which substantially returns to a non-softened condition when cooled.

The term "user" or "caregiver" refers herein to one who fits an absorbent article, such as, but not limited to, a diaper, diaper pant, training pant, youth pant, incontinent product, or other absorbent article about the wearer of one of these absorbent articles. A user and a wearer can be one and the same person.

Absorbent Article:

Referring to FIGS. **1-5**A, a non-limiting illustration of an absorbent article **10**, for example, a diaper, is illustrated. Other embodiments of the absorbent article could include training pants, youth pants, adult incontinence garments, and feminine hygiene articles. While the embodiments and illustrations described herein may generally apply to absorbent articles manufactured in the product longitudinal direction, which is hereinafter called the machine direction manufac-

turing of a product, it should be noted that one of ordinary skill in the art could apply the information herein to absorbent articles manufactured in the latitudinal direction of the product, which hereinafter is called the cross direction manufacturing of a product, without departing from the spirit and scope of the disclosure. For example, the absorbent article **110** in FIGS. **6** and **7** provides an exemplary embodiment of an absorbent article **110** that can be manufactured in cross-direction manufacturing process.

The absorbent article **10** illustrated in FIGS. **1** and **2** and the absorbent article **110** in FIGS. **6** and **7** can each include a chassis **11**. The absorbent article **10**, **110** can include a front waist region **12**, a rear waist region **14**, and a crotch region **16** disposed between the front waist region **12** and the rear waist region **14** and interconnecting the front and rear waist regions, **12**, **14**, respectively. The front waist region **12** can be referred to as the front end region, the rear waist region **14** can be referred to as the rear end region, and the crotch region **16** can be referred to as the intermediate region. In the embodiment depicted in FIGS. **6** and **7**, a three-piece construction of an absorbent article **110** is depicted where the absorbent article **110** can have a chassis **11** including a front waist panel **13** defining the front waist region **12**, a rear waist panel **15** defining the rear waist region **14**, and an absorbent panel **17** defining the crotch region **16** of the absorbent article **110**. The absorbent panel **17** can extend between the front waist panel **13** and the rear waist panel **15**. In some embodiments, the absorbent panel **17** can overlap the front waist panel **13** and the rear waist panel **15**. The absorbent panel **17** can be bonded to the front waist panel **13** and the rear waist panel **15** to define a three-piece construction. However, it is contemplated that an absorbent article can be manufactured in a cross-direction without being a three-piece construction garment.

The absorbent article **10**, **110** can have a pair of longitudinal side edges **18**, **20**, and a pair of opposite waist edges, respectively designated front waist edge **22** and rear waist edge **24**. The front waist region **12** can be contiguous with the front waist edge **22** and the rear waist region **14** can be contiguous with the rear waist edge **24**. The longitudinal side edges **18**, **20** can extend from the front waist edge **22** to the rear waist edge **24**. The longitudinal side edges **18**, **20** can extend in a direction parallel to the longitudinal direction **30** for their entire length, such as for the absorbent articles **10**, **110** illustrated in FIGS. **2** and **6**. In other embodiments, the longitudinal side edges **18**, **20** can be curved between the front waist edge **22** and the rear waist edge **24**. In the absorbent article **110** of FIGS. **6** and **7**, the longitudinal side edges **18**, **20** can include portions of the front waist panel **13**, the absorbent panel **17**, and the rear waist panel **15**.

The front waist region **12** can include the portion of the absorbent article **10**, **110** that, when worn, is positioned at least in part on the front of the wearer while the rear waist region **14** can include the portion of the absorbent article **10**, **110** that, when worn, is positioned at least in part on the back of the wearer. The crotch region **16** of the absorbent article **10**, **110** can include the portion of the absorbent article **10**, **110** that, when worn, is positioned between the legs of the wearer and can partially cover the lower torso of the wearer. The waist edges, **22** and **24**, of the absorbent article **10**, **110** are configured to encircle the waist of the wearer and together define a central waist opening **23** (as labeled in FIG. **1** and FIG. **6**) for the waist of the wearer. Portions of the longitudinal side edges **18**, **20** in the crotch region **16** can generally define leg openings for the legs of the wearer when the absorbent article **10**, **110** is worn.

The absorbent article **10**, **110** can include an outer cover **26** and a bodyside liner **28**. The outer cover **26** and the bodyside liner **28** can form a portion of the chassis **11**. In an embodiment, the bodyside liner **28** can be bonded to the outer cover **26** in a superposed relation by any suitable means such as, but not limited to, adhesives, ultrasonic bonds, thermal bonds, pressure bonds, or other conventional techniques. As an example, FIGS. **4**-**5**F depict the bodyside liner **28** bonded to the outer cover **26** with adhesive **27**. The outer cover **26** can define a length in a longitudinal direction **30**, and a width in the lateral direction **32**, which, in the illustrated embodiment, can coincide with the length and width of the absorbent article **10**, **110**. As illustrated in FIGS. **2** and **7**, the absorbent article **10**, **110** can have a longitudinal axis **29** extending in the longitudinal direction **30** and a lateral axis **31** extending in the lateral direction **32**.

The chassis **11** can include an absorbent body **34**. The absorbent body **34** can be disposed between the outer cover **26** and the bodyside liner **28**. The absorbent body **34** can have longitudinal edges, **36** and **38**, which, in an embodiment, can form portions of the longitudinal side edges, **18** and **20**, respectively, of the absorbent article **10**, **110**. The absorbent body **34** can have a first end edge **40** that is opposite a second end edge **42**, respectively, which, in an embodiment, can form portions of the waist edges, **22** and **24**, respectively, of the absorbent article **10**, **110**. In some embodiments, the first end edge **40** can be in the front waist region **12**. In some embodiments, the second end edge **42** can be in the rear waist region **14**. In an embodiment, the absorbent body **34** can have a length and width that are the same as or less than the length and width of the absorbent article **10**, **110**. The bodyside liner **28**, the outer cover **26**, and the absorbent body **34** can form part of an absorbent assembly **44**. In the absorbent article **110** of FIGS. **6** and **7**, the absorbent panel **17** can form the absorbent assembly **44**. The absorbent assembly **44** can also include a fluid transfer layer (not shown) and a fluid acquisition layer (not shown) between the bodyside liner **28** and the fluid transfer layer as is known in the art. The absorbent assembly **44** can also include a spacer layer (not shown) disposed between the absorbent body **34** and the outer cover **26** as is known in the art.

The absorbent article **10**, **110** can be configured to contain and/or absorb liquid, solid, and semi-solid body exudates discharged from the wearer. In some embodiments, containment flaps **50**, **52** can be configured to provide a barrier to the lateral flow of body exudates. To further enhance containment and/or absorption of body exudates, the absorbent article **10**, **110** can suitably include a waist containment member **54**, **154**, **254**, **354**, **454**, **554**. In some embodiments, the waist containment member **54**, **154**, **254**, **354**, **454**, **554** can be disposed in the rear waist region **14** of the absorbent article **10**, **110**. Although not depicted herein, it is contemplated that the waist containment member **54**, **154**, **254**, **354**, **454**, **554** can be additionally or alternatively disposed in the front waist region **12** of the absorbent article **10**, **110**.

The waist containment member **54**, **154**, **254**, **354**, **454**, **554** can be disposed on the body facing surface **19** of the chassis **11** to help contain and/or absorb body exudates. In some embodiments, such as in the absorbent article **10** depicted in FIGS. **1**-**5**F, the waist containment member **54**, **154**, **254**, **354**, **454**, **554** can be disposed on the body facing surface **45** of the absorbent assembly **44**. In some embodiments, the waist containment member **54**, **154**, **254**, **354**, **454**, **554** can be disposed on the body facing surface **56** of the bodyside liner **28**. In some embodiments, such as in the absorbent article **110** depicted in FIGS. **6** and **7**, the waist

containment member **54** can be disposed on the body facing surface **58** of the rear waist panel **15**.

The absorbent article **10**, **110** can further include leg elastic members **60**, **62** as are known to those skilled in the art. The leg elastic members **60**, **62** can be attached to the outer cover **26** and/or the bodyside liner **28** along the opposite longitudinal side edges, **18** and **20**, and positioned in the crotch region **16** of the absorbent article **10**, **110**. The leg elastic members **60**, **62** can be parallel to the longitudinal axis **29** as shown in FIGS. **2** and **7** or can be curved as is known in the art. The leg elastic members **60**, **62** can provide elasticized leg cuffs.

Additional details regarding each of these elements of the absorbent article **10**, **110** described herein can be found below and with reference to the FIGS. **1** through **9**.

Outer Cover:

The outer cover **26** and/or portions thereof can be breathable and/or liquid impermeable. The outer cover **26** and/or portions thereof can be elastic, stretchable, or non-stretchable. The outer cover **26** may be constructed of a single layer, multiple layers, laminates, spunbond fabrics, films, meltblown fabrics, elastic netting, microporous webs, bonded-carded webs or foams provided by elastomeric or polymeric materials. In an embodiment, for example, the outer cover **26** can be constructed of a microporous polymeric film, such as polyethylene or polypropylene.

In an embodiment, the outer cover **26** can be a single layer of a liquid impermeable material, such as a polymeric film. In an embodiment, the outer cover **26** can be suitably stretchable, and more suitably elastic, in at least the lateral direction **32** of the absorbent article **10**, **110**. In an embodiment, the outer cover **26** can be stretchable, and more suitably elastic, in both the lateral **32** and the longitudinal **30** directions. In an embodiment, the outer cover **26** can be a multi-layered laminate in which at least one of the layers is liquid impermeable. In some embodiments, the outer cover **26** can be a two layer construction, including an outer layer (not shown) and an inner layer (not shown) which can be bonded together such as by a laminate adhesive. Suitable laminate adhesives can be applied continuously or intermittently as beads, a spray, parallel swirls, or the like, but it is to be understood that the inner layer can be bonded to the outer layer by other bonding methods, including, but not limited to, ultrasonic bonds, thermal bonds, pressure bonds, or the like.

The outer layer of the outer cover **26** can be any suitable material and may be one that provides a generally cloth-like texture or appearance to the wearer. An example of such material can be a 100% polypropylene bonded-carded web with a diamond bond pattern available from Sandler A.G., Germany, such as 30 gsm Sawabond 4185® or equivalent. Another example of material suitable for use as an outer layer of an outer cover **26** can be a 20 gsm spunbond polypropylene non-woven web. The outer layer may also be constructed of the same materials from which the bodyside liner **28** can be constructed as described herein.

The liquid impermeable inner layer of the outer cover **26** (or the liquid impermeable outer cover **26** where the outer cover **26** is of a single-layer construction) can be either vapor permeable (i.e., "breathable") or vapor impermeable. The liquid impermeable inner layer (or the liquid impermeable outer cover **26** where the outer cover **26** is of a single-layer construction) can be manufactured from a thin plastic film. The liquid impermeable inner layer (or the liquid impermeable outer cover **26** where the outer cover **26** is of a single-layer construction) can inhibit liquid body exudates from leaking out of the absorbent article **10**, **110** and wetting articles, such as bed sheets and clothing, as well as the wearer and caregiver.

In some embodiments, where the outer cover **26** is of a single layer construction, it can be embossed and/or matte finished to provide a more cloth-like texture or appearance. The outer cover **26** can permit vapors to escape from the absorbent article **10**, **110** while preventing liquids from passing through. A suitable liquid impermeable, vapor permeable material can be composed of a microporous polymer film or a non-woven material which has been coated or otherwise treated to impart a desired level of liquid impermeability.

Absorbent Body:

The absorbent body **34** can be suitably constructed to be generally compressible, conformable, pliable, non-irritating to the wearer's skin and capable of absorbing and retaining liquid body exudates. The absorbent body **34** can be manufactured in a wide variety of sizes and shapes (for example, rectangular, trapezoidal, T-shape, I-shape, hourglass shape, etc.) and from a wide variety of materials. The size and the absorbent capacity of the absorbent body **34** should be compatible with the size of the intended wearer (infants to adults) and the liquid loading imparted by the intended use of the absorbent article **10**, **110**. The absorbent body **34** can have a length and width that can be less than or equal to the length and width of the absorbent article **10**, **110**.

In an embodiment, the absorbent body **34** can be composed of a web material of hydrophilic fibers, cellulosic fibers (e.g., wood pulp fibers), natural fibers, synthetic fibers, woven or nonwoven sheets, scrim netting or other stabilizing structures, superabsorbent material, binder materials, surfactants, selected hydrophobic and hydrophilic materials, pigments, lotions, odor control agents or the like, as well as combinations thereof. In an embodiment, the absorbent body **34** can be a matrix of cellulosic fluff and superabsorbent material. In an embodiment, the absorbent body **34** may be constructed of a single layer of materials, or in the alternative, may be constructed of two or more layers of materials.

Various types of wettable, hydrophilic fibers can be used in the absorbent body **34**. Examples of suitable fibers include natural fibers, cellulosic fibers, synthetic fibers composed of cellulose or cellulose derivatives, such as rayon fibers; inorganic fibers composed of an inherently wettable material, such as glass fibers; synthetic fibers made from inherently wettable thermoplastic polymers, such as particular polyester or polyamide fibers, or composed of nonwettable thermoplastic polymers, such as polyolefin fibers which have been hydrophilized by suitable means. The fibers may be hydrophilized, for example, by treatment with a surfactant, treatment with silica, treatment with a material which has a suitable hydrophilic moiety and is not readily removed from the fiber, or by sheathing the nonwettable, hydrophobic fiber with a hydrophilic polymer during or after formation of the fiber. Suitable superabsorbent materials can be selected from natural, synthetic, and modified natural polymers and materials. The superabsorbent materials can be inorganic materials, such as silica gels, or organic compounds, such as cross-linked polymers. In an embodiment, the absorbent body **34** can be free of superabsorbent material.

If a spacer layer is present, the absorbent body **34** can be disposed on the spacer layer and superposed over the outer cover **26**. The spacer layer can be bonded to the outer cover **26**, for example, by adhesive. In some embodiments, a spacer layer may not be present and the absorbent body **34** can directly contact the outer cover **26** and can be directly bonded to the outer cover **26**. However, it is to be understood

that the absorbent body **34** may be in contact with, and not bonded with, the outer cover **26** and remain within the scope of this disclosure. In an embodiment, the outer cover **26** can be composed of a single layer and the absorbent body **34** can be in contact with the singer layer of the outer cover **26**. In some embodiments, at least a portion of a layer, such as but not limited to, a fluid transfer layer and/or a spacer layer, can be positioned between the absorbent body **34** and the outer cover **26**. The absorbent body **34** can be bonded to the fluid transfer layer and/or the spacer layer.

Bodyside Liner:

The bodyside liner **28** of the absorbent article **10**, **110** can overlay the absorbent body **34** and the outer cover **26** and can isolate the wearer's skin from liquid waste retained by the absorbent body **34**. In various embodiments, a fluid transfer layer can be positioned between the bodyside liner **28** and the absorbent body **34**. In various embodiments, an acquisition layer (not shown) can be positioned between the bodyside liner **28** and the absorbent body **34** or a fluid transfer layer, if present. In various embodiments, the bodyside liner **28** can be bonded to the acquisition layer, or to the fluid transfer layer if no acquisition layer is present, via adhesive and/or by a point fusion bonding. The point fusion bonding may be selected from ultrasonic, thermal, pressure bonding, and combinations thereof.

In an embodiment, the bodyside liner **28** can extend beyond the absorbent body **34** and/or a fluid transfer layer, if present, and/or an acquisition layer, if present, and/or a spacer layer, if present, to overlay a portion of the outer cover **26** and can be bonded thereto by any method deemed suitable, such as, for example, by being bonded thereto by adhesive, to substantially enclose the absorbent body **34** between the outer cover **26** and the bodyside liner **28**. The bodyside liner **28** may be narrower than the outer cover **26**. However, in other embodiments, the bodyside liner **28** and the outer cover **26** may be of the same dimensions in width and length. In other embodiments, the bodyside liner **28** can be of greater width than the outer cover **26**. It is also contemplated that the bodyside liner **28** may not extend beyond the absorbent body **34** and/or may not be secured to the outer cover **26**. In some embodiments, the bodyside liner **28** can wrap at least a portion of the absorbent body **34**, including wrapping around both longitudinal edges **36**, **38** of the absorbent body **34**, and/or one or more of the end edges **40**, **42**. It is further contemplated that the bodyside liner **28** may be composed of more than one segment of material. The bodyside liner **28** can be of different shapes, including rectangular, hourglass, or any other shape. The bodyside liner **28** can be suitably compliant, soft feeling, and non-irritating to the wearer's skin and can be the same as or less hydrophilic than the absorbent body **34** to permit body exudates to readily penetrate through to the absorbent body **34** and provide a relatively dry surface to the wearer.

The bodyside liner **28** can be manufactured from a wide selection of materials, such as synthetic fibers (for example, polyester or polypropylene fibers), natural fibers (for example, wood or cotton fibers), a combination of natural and synthetic fibers, porous foams, reticulated foams, apertured plastic films, or the like. Examples of suitable materials include, but are not limited to, rayon, wood, cotton, polyester, polypropylene, polyethylene, nylon, or other heat-bondable fibers, polyolefins, such as, but not limited to, copolymers of polypropylene and polyethylene, linear low-density polyethylene, and aliphatic esters such as polylactic acid, finely perforated film webs, net materials, and the like, as well as combinations thereof.

Various woven and non-woven fabrics can be used for the bodyside liner **28**. The bodyside liner **28** can include a woven fabric, a nonwoven fabric, a polymer film, a film-fabric laminate or the like, as well as combinations thereof. Examples of a nonwoven fabric can include spunbond fabric, meltblown fabric, coform fabric, carded web, bonded-carded web, bicomponent spunbond fabric, spunlace, or the like, as well as combinations thereof. The bodyside liner **28** need not be a unitary layer structure, and thus, can include more than one layer of fabrics, films, and/or webs, as well as combinations thereof. For example, the bodyside liner **28** can include a support layer and a projection layer that can be hydroentagled. The projection layer can include hollow projections, such as those disclosed in U.S. Patent Application Publication No. 2014/0121623 invented by Kirby, Scott S. C. et al.

For example, the bodyside liner **28** can be composed of a meltblown or spunbond web of polyolefin fibers. Alternatively, the bodyside liner **28** can be a bonded-carded web composed of natural and/or synthetic fibers. The bodyside liner **28** can be composed of a substantially hydrophobic material, and the hydrophobic material can, optionally, be treated with a surfactant or otherwise processed to impart a desired level of wettability and hydrophilicity. The surfactant can be applied by any conventional means, such as spraying, printing, brush coating or the like. The surfactant can be applied to the entire bodyside liner **28** or it can be selectively applied to particular sections of the bodyside liner **28**.

In an embodiment, a bodyside liner **28** can be constructed of a non-woven bicomponent web. The non-woven bicomponent web can be a spunbonded bicomponent web, or a bonded-carded bicomponent web. An example of a bicomponent staple fiber includes a polyethylene/polypropylene bicomponent fiber. In this particular bicomponent fiber, the polypropylene forms the core and the polyethylene forms the sheath of the fiber. Fibers having other orientations, such as multi-lobe, side-by-side, end-to-end may be used without departing from the scope of this disclosure. In an embodiment, a bodyside liner **28** can be a spunbond substrate with a basis weight from about 10 or 12 to about 15 or 20 gsm. In an embodiment, a bodyside liner **28** can be a 12 gsm spunbond-meltblown-spunbond substrate having 10% meltblown content applied between the two spunbond layers.

Although the outer cover **26** and bodyside liner **28** can include elastomeric materials, it is contemplated that the outer cover **26** and the bodyside liner **28** can be composed of materials which are generally non-elastomeric. In an embodiment, the bodyside liner **28** can be stretchable, and more suitably elastic. In an embodiment, the bodyside liner **28** can be suitably stretchable and more suitably elastic in at least the lateral or circumferential direction of the absorbent article **10**, **110**. In other aspects, the bodyside liner **28** can be stretchable, and more suitably elastic, in both the lateral and the longitudinal directions **32**, **30**, respectively.

Containment Flaps:

In an embodiment, the absorbent article **10**, **110** can include a pair of containment flaps **50**, **52**. The containment flaps **50**, **52** can be formed separately from the absorbent chassis **11** and attached to the chassis **11** or can be formed integral to the chassis **11**. In some embodiments, the containment flaps **50**, **52** can be secured to the chassis **11** of the absorbent article **10**, **110** in a generally parallel, spaced relation with each other laterally inward of the leg openings to provide a barrier against the flow of body exudates. One containment flap **50** can be on a first side of the longitudinal axis **29** and the other containment flap **52** can be on a second

side of the longitudinal axis **29**. In an embodiment, the containment flaps **50**, **52** can extend generally in a longitudinal direction **30** from the front waist region **12** of the absorbent article **10**, **110**, through the crotch region **16** to the rear waist region **14** of the absorbent article **10**. In some embodiments, the containment flaps **50**, **52** can extend in a direction substantially parallel to the longitudinal axis **29** of the absorbent article **10**, **110**, however, in other embodiments, the containment flaps **50**, **52** can be curved, as is known in the art. In other embodiments, such as the absorbent article **110** in FIGS. **6** and **7**, the containment flaps **50**, **52** can be disposed on the absorbent panel **17** in the crotch region **16**.

In embodiments where the containment flaps **50**, **52** are coupled to the chassis **11**, the containment flaps **50**, **52** can be bonded to the bodyside liner **28**, the outer cover **26**, or another layer, such as a spacer layer, if present, with a barrier adhesive, as is known in the art. Of course, the containment flaps **50**, **52** can be bonded to other components of the chassis **11** and can be bonded with other suitable means other than a barrier adhesive. For example, the containment flaps **50**, **52** can be bonded to the bodyside liner **28**, the outer cover **26**, or another layer with pressure bonding, thermal bonding, or ultrasonic bonding. The containment flaps **50**, **52** can be constructed of a fibrous material which can be similar to the material forming the bodyside liner **28**. Other conventional materials, such as polymer films, can also be employed.

As illustrated in FIGS. **2** and **7**, the containment flaps **50**, **52** can each include a base portion **64** and a projection portion **66**. The base portion **64** can be bonded to the chassis **11**, for example, to the bodyside liner **28** or the outer cover **26** as mentioned above. The base portion **64** can include a proximal end **64***a* and a distal end **64***b*. The projection portion **66** can be separated from the base portion **64** at the proximal end **64***a* of the base portion **64**. As used in this context, the projection portion **66** is separated from the base portion **64** at the proximal end **64***a* of the base portion **64** in that the proximal end **64***a* of the base portion **64** defines a transition between the projection portion **66** and the base portion **64**. The proximal end **64***a* of the base portion **64** can be located where the respective containment flap **50**, **52** is bonded to the chassis **11** at the most laterally inward location. For example, if a barrier adhesive bonds the base portion **64** to the bodyside liner **28**, then the proximal end **64***a* of the base portion **64** of each containment flap **50**, **52** can be located adjacent the barrier adhesive. In some embodiments, the distal ends **64***b* of the base portion **64** can laterally extend to the respective longitudinal side edges **18**, **20** of the absorbent article **10**, **110**. In other embodiments, the distal ends **64***b* of the base portion **64** can end laterally inward of the respective longitudinal side edges **18**, **20** of the absorbent article **10**, **110**. The containment flaps **50**, **52** can also each include a projection portion **66** that is configured to extend away from the body facing surface **19** of the chassis **11** at least in the crotch region **16** when the absorbent article **10**, **110** is in a relaxed configuration, as illustrated in FIGS. **5**A-**5**F. As shown in FIGS. **2** and **7**, the containment flaps **50**, **52** can include a tack-down region **71** in either or both of the front waist region **12** and the rear waist region **14** where the projection portion **66** is coupled to the body facing surface **19** of the chassis **11**.

It is contemplated that the containment flaps **50**, **52** can be of various configurations and shapes, and can be constructed by various methods. For example, the containment flaps **50**, **52** of FIGS. **2**-**5**F and **7** depict a vertical containment flap **50**, **52** with a tack-down region **71** in both the front and rear waist regions **12**, **14** where the projection portion **66** of each containment flap **50**, **52** is tacked down to the bodyside liner **28** towards the longitudinal axis **29** of the absorbent article **10**. However, it is contemplated that the containment flaps **50**, **52** can include a tack-down region **71** where the projection portion **66** of each of the containment flaps **50**, **52** is folded back upon itself and coupled to itself and the bodyside liner **28** in a "C-shape" configuration, as is known in the art and described in U.S. Pat. No. 5,895,382 to Robert L. Popp et al. As yet another alternative, it is contemplated that the containment flaps **50**, **52** could be constructed in a "T-shape" configuration, such as described in U.S. patent application Ser. No. 13/900,134 by Robert L. Popp et al., which published as U.S. Patent Application Publication 2014/0350504. Such a configuration can also include a tack-down region **71** in either or both of the front and rear waist regions **12**, **14**, respectively. Of course, other configurations of containment flaps **50**, **52** can be used in the absorbent article **10**, **110** and still remain within the scope of this disclosure.

The containment flaps **50**, **52** can include one or more flap elastic members **68**, such as the two flap elastic strands depicted in FIG. **2** (omitted in FIG. **7** for purposes of clarity). Suitable elastic materials for the flap elastic members **68** can include sheets, strands or ribbons of natural rubber, synthetic rubber, or thermoplastic elastomeric materials. Of course, while two elastic members **68** are shown in each containment flap **50**, **52**, it is contemplated that the containment flaps **50**, **52** can be configured with one or three or more elastic members **68**. Alternatively or additionally, the containment flaps **50**, **52** can be composed of a material exhibiting elastic properties itself.

The flap elastic members **68**, as illustrated in FIG. **2**, can have two strands of elastomeric material extending longitudinally in the projection portion **66** of the containment flaps **50**, **52**, in generally parallel, spaced relation with each other. The flap elastic members **68** can be within the containment flaps **50**, **52** while in an elastically contractible condition such that contraction of the strands gathers and shortens the projection portions **66** of the containment flaps **50**, **52** in the longitudinal direction **30**. As a result, the elastic members **68** can bias the projection portions **66** of the containment flaps **50**, **52** to extend away from the body facing surface **45** of the absorbent assembly **44** in a generally upright orientation of the containment flaps **50**, **52**, especially in the crotch region **16** of the absorbent article **10**, **110**, when the absorbent article **10** is in a relaxed configuration. Such an upright orientation of the projection portion **66** of containment flap **50** is illustrated in the cross-sectional views of FIGS. **5**A-**5**F, where the absorbent article **10** is in a relaxed configuration.

During manufacture of the containment flaps **50**, **52** at least a portion of the elastic members **68** can be bonded to the containment flaps **50**, **52** while the elastic members **68** are elongated. The percent elongation of the elastic members **68** can be, for example, about 110% to about 350%. In one embodiment, the elastic members **68** can be coated with adhesive while elongated to a specified length prior to attaching to the elastic members **68** to the containment flaps **50**, **52**. In a stretched condition, the length of the elastic members **68** which have adhesive coupled thereto can provide an active flap elastic region **70** in the containment flaps **50**, **52**, as labeled in FIG. **2** (omitted in FIG. **7** for purposes of clarity), which will gather upon relaxation of the absorbent article **10**, **110**. The active flap elastic region **70** of containment flaps **50**, **52** can be of a longitudinal length that is less than the length of the absorbent article **10**, **110**. In this exemplary method of bonding the elastic members **68** to the

containment flaps **50**, **52**, the portion of the elastic members **68** not coated with adhesive, will retract after the elastic members **68** and the absorbent article **10** are cut in manufacturing to form an individual absorbent article **10**, **110**. As noted above, the relaxing of the elastic members **68** in the active flap elastic region **70** when the absorbent article **10**, **110** is in a relaxed condition can cause each containment flap **50**, **52** to gather and cause the projection portion **66** of each containment flap **50**, **52** to extend away from the body facing surface **19** of the chassis **11** (e.g., the body facing surface **45** of the absorbent assembly **44** or the body facing surface **56** of the bodyside liner **28**), as depicted in FIGS. **5**A-**5**F.

Of course, the elastic members **68** can be bonded to the containment flaps **50**, **52** in various other ways as known by those of skill in the art to provide an active flap elastic region **70**, which is within the scope of this disclosure. Additionally, the active flap elastic regions **70** can be shorter or longer than depicted herein, including extending to the front waist edge **22** and the rear waist edge **24**, and still be within the scope of this disclosure.

Leg Elastics:

Leg elastic members **60**, **62** can be secured to the outer cover **26**, such as by being bonded thereto by laminate adhesive, generally laterally inward of the longitudinal side edges, **18** and **20**, of the absorbent article **10**, **110**. The leg elastic members **60**, **62** can form elasticized leg cuffs that further help to contain body exudates. In an embodiment, the leg elastic members **60**, **62** may be disposed between inner and outer layers (not shown) of the outer cover **26** or between other layers of the absorbent article **10**, for example, between the base portion **64** of each containment flap **50**, **52** and the bodyside liner **28**, between the base portion **64** of each containment flap **50**, **52** and the outer cover **26**, or between the bodyside liner **28** and the outer cover **26**. The leg elastic members **60**, **62** can be one or more elastic components near each longitudinal side edge **18**, **20**. For example, the leg elastic members **60**, **62** as illustrated herein in FIGS. **2** and **7** each include two elastic strands. A wide variety of elastic materials may be used for the leg elastic members **60**, **62**. Suitable elastic materials can include sheets, strands or ribbons of natural rubber, synthetic rubber, or thermoplastic elastomeric materials. The elastic materials can be stretched and secured to a substrate, secured to a gathered substrate, or secured to a substrate and then elasticized or shrunk, for example, with the application of heat, such that the elastic retractive forces are imparted to the substrate. Additionally, it is contemplated that the leg elastic members **60**, **62** can be formed with the containment flaps **50**, **52**, and then attached to the chassis **11** in some embodiments. Of course, the leg elastic members **60**, **62** can be omitted from the absorbent article **10**, **110** without departing from the scope of this disclosure.

Waist Containment Member:

In an embodiment, the absorbent article **10**, **110** can have one or more waist containment members **54**, **154**, **254**, **354**, **454**, **554**. FIGS. **1**-**5**A illustrate a preferred embodiment of a waist containment member **54** on an absorbent article **10**, such as a diaper, and FIGS. **6** and **7** illustrate a preferred embodiment of a waist containment member **54** on an absorbent article **110**, such as a pant. FIGS. **5**B-**5**F illustrate cross-sectional views of alternative embodiments of a waist containment member **154**, **254**, **354**, **454**, **554**, respectively, that can be employed as an alternative to or in addition to the waist containment members **54** depicted on the absorbent articles **10**, **110** of FIGS. **2** and **7**. Because many of the features of the waist containment members **54**, **154**, **254**, **354**, **454**, and **554** are similar, the discussion below addressing waist containment member **54** of FIGS. **1**-**5**A applies to the alternative waist containment members **154**, **254**, **354**, **554**, unless otherwise noted. The unique features to waist containment members **154**, **254**, **354**, **454**, and **554** will be discussed in their own right with respect to FIGS. **5**B-**5**F, respectively.

The waist containment member **54** can be disposed in the rear waist region **14**. As will be discussed in more detail below, the waist containment member **54** can help contain and/or absorb body exudates, especially low viscosity fecal matter, and as such, can be preferred to be in the rear waist region **14**. In some embodiments, the absorbent article **10**, **110** can have a waist containment member **54** disposed in the front waist region **12**. A waist containment member **54** in the front waist region **12** can help contain and/or absorb body exudates, such as urine, in the front waist region **12**. Although not as prevalent as in the rear waist region **14**, in some circumstances, fecal material may also spread to the front waist region **12**, and thus, a waist containment member **54** disposed in the front waist region **12** can help contain and/or absorb body exudates as well. In other embodiments, the absorbent article **10**, **110** can have a waist containment member **54** in both the rear waist region **14** and the front waist region **12**.

The waist containment member **54** can be disposed on the body facing surface **45** of the absorbent assembly **44**. In some embodiments, such as in embodiments illustrated in FIGS. **1**-**5**F, the waist containment member **54** can be disposed on the body facing surface **56** of the bodyside liner **28**. However, in some embodiments, such as the absorbent article **110** in FIG. **7**, the waist containment member **54** can be disposed on a body facing surface **58** of the rear waist panel **15**.

The waist containment member **54** can include a first longitudinal side edge **72** and a second longitudinal side edge **74**. The first longitudinal side edge **72** can be opposite from the second longitudinal side edge **74**. The distance between the first longitudinal side edge **72** and the second longitudinal side edge **74** can define a width **51** of the waist containment member **54** in the lateral direction **32**, as shown in FIG. **2**. Although not depicted, in some embodiments, the first longitudinal side edge **72** can substantially align with the first longitudinal side edge **18** of the absorbent article **10**, **110**. Similarly, in some embodiments, the second longitudinal side edge **74** can align with the second longitudinal side edge **20** of the absorbent article **10**, **110**. As illustrated in FIGS. **2** and **7**, the waist containment member **54** can be configured such that the first longitudinal side edge **72** can be disposed laterally outward of the proximal end **64***a* of the base portion **64** of the containment flap **50**. Similarly, the waist containment member **54** can be configured such that the second longitudinal side edge **74** can be disposed laterally outward of the proximal end **64***a* of the base portion **64** of the containment flap **52**. The waist containment member **54** can also include an upper lateral edge **75** and a lower lateral edge **88**. The first longitudinal side edge **72**, the second longitudinal side edge **74**, the upper lateral edge **75**, and the lower lateral edge **88** are defined when the absorbent article **10**, **110** is in the stretched, laid-flat configuration, such as illustrated in FIGS. **2** and **7**.

In some embodiments, the width **51** of the waist containment member **54** in the lateral direction **32** as compared to the width **53** of the chassis **11** (as labeled in FIG. **2**) can have a ratio of about 0.85 to about 1.00. In some embodiments, the width **51** of the waist containment member **54** in the lateral direction **32** as compared to the width **53** of the chassis **11** can have a ratio of about 0.87 to about 1.00. And

in other embodiments, the width **51** of the waist containment member **54** in the lateral direction **32** as compared to the width **53** of the chassis **11** can have a ratio of about 0.90 to about 1.00. For purposes herein, the width **53** of the chassis **11** for use in this ratio is the width of the chassis **11** in the waist region in which the waist containment member **54** is disposed and both width measurements are taken in a direction parallel to the lateral direction **32**. Thus, for the examples illustrated herein, the width **51** of the waist containment member **54** can be compared to the width **53** of the chassis **11** in the rear waist region **14**. Additionally, the width **51** of the waist containment member **54** in the lateral direction **32** and the width **53** of the chassis **11** as discussed for the ratios herein are to be measured when the absorbent article **10**, **110** is in the stretched, laid flat configuration.

As best illustrated in FIGS. **4-5**F, the waist containment member **54** can also include a proximal portion **76** and a distal portion **78**. The waist containment member **54** can also include an intermediate portion **77**. The proximal portion **76** can be coupled to the body facing surface **19** of chassis **11** (e.g., the body facing surface **45** of the absorbent assembly **44** or the body facing surface **56** of the bodyside liner **28**). The intermediate portion **77** can be disposed between the proximal portion **76** and the distal portion **78**. The intermediate portion **77** can be free to move independent of the proximal portion **76** and the distal portion **78** and can be free to move independent of the body facing surface **19** of the chassis **11** to provide a containment pocket **82** for containing body exudates. In some embodiments, the distal portion **78** can be disposed underneath the intermediate portion **77** when the absorbent article **10** is disposed in the stretched, laid-flat configuration (such as shown in the cross-sectional view in FIG. **4**).

As illustrated in FIGS. **4-5**E, a fold **79***a* can separate the proximal portion **76** from the intermediate portion **77**. As used in this context, the fold **79***a* separates the proximal portion **76** from the intermediate portion **77** in that the fold **79***a* defines a transition between the proximal portion **76** and the intermediate portion **77**. The fold **79***a* can define the upper lateral edge **75** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. A fold **79***b* can separate the intermediate portion **77** from the distal portion **78**. As used in this context, the fold **79***b* separates the intermediate portion **77** from the distal portion **78** in that the fold **79***b* defines a transition between the intermediate portion **77** and the distal portion **78**. The fold **79***b* can define the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. Folds **79***a* and **79***b* can be created in the method **610** of manufacturing the absorbent article **10**, **110** including the waist containment member **54**, as will be discussed in further detail below.

The proximal portion **76** can be coupled to the body facing surface **19** of the chassis **11** with an adhesive **80**, and in some embodiments, the proximal portion **76** can be coupled to the body facing surface **45** of the absorbent assembly **44**. In some embodiments, such as in embodiments illustrated in FIGS. **2-5**F, the proximal portion **76** of the waist containment member **54** can be coupled to the body facing surface **56** of the bodyside liner **28**. However, in some embodiments, such as the absorbent article **110** in FIG. **7**, the proximal portion **76** of the waist containment member **54** can be coupled to the body facing surface **58** of the rear waist panel **15**. The proximal portion **76** can be coupled to the body facing surface **45** of the absorbent assembly **44** with adhesive **80** along the entire length of the proximal portion **76** in the longitudinal direction **30**, however, it is contemplated that only a portion of the proximal portion **76** in the longitudinal direction **30** can be coupled to the body facing surface **45** of the absorbent assembly **44**. Of course, it is contemplated that the proximal portion **76** of the waist containment member **54** can be coupled to the body facing surface **19** of the chassis **11** or the body facing surface **45** of the absorbent assembly **44** by means other than an adhesive **80**, such as by pressure bonding, ultrasonic bonding, thermal bonding, and combinations thereof. In preferred embodiments, the proximal portion **76** is coupled to the body facing surface **19** of the chassis **11** in the lateral direction **32** in a constant fashion, as opposed to an intermittent fashion, such that a longitudinal barrier to body exudates is formed between the proximal portion **76** and the body facing surface **19** of the chassis **11**.

In some embodiments, the proximal portion **76** of the waist containment member **54** can include a longitudinal length measured in the longitudinal direction **30** that is shorter than a longitudinal length of the distal portion **78** of the waist containment member **54**. As illustrated in the embodiment depicted in FIGS. **4-5**F, the proximal portion **76** of the waist containment member **54** can include a longitudinal length measured in the longitudinal direction **30** that is shorter than a longitudinal length of the intermediate portion **77** and the longitudinal length of the distal portion **78** of the waist containment member **54** combined. However in some embodiments, the longitudinal length of the proximal portion **76** can be substantially equal to or larger than the longitudinal length of the intermediate portion **77** and the longitudinal length of the distal portion **78** of the waist containment member **54**. For purposes herein, the longitudinal length of the proximal portion **76**, the longitudinal length of the intermediate portion **77**, and the longitudinal length of the distal portion **78** of the waist containment member **54** are measured when the absorbent article **10**, **110** is in the stretched, laid flat configuration.

As illustrated in FIG. **3**, because the intermediate portion **77** of the waist containment member **54** can freely move independent of the proximal portion **76** and the body facing surface **19** of the chassis **11** when the absorbent article **10**, **110** is in the relaxed configuration, the intermediate portion **77** can help provide a containment pocket **82** when the absorbent article **10**, **110** is in the relaxed configuration. The containment pocket **82** can help provide a barrier to contain and/or can help absorb body exudates. The containment pocket **82** can be especially beneficial for containing and/or absorbing low viscosity fecal matter, which can be prevalent in younger children. As previously noted, the first longitudinal side edge **72** can be disposed laterally outward of the proximal end **64***a* of the base portion **64** of the containment flap **50**, and thus, the containment pocket **82** can extend laterally outward of the proximal end **64***a* of the containment flap **50**. Similarly, the second longitudinal side edge **74** can be disposed laterally outward of the proximal end **64***a* of the base portion **64** of the containment flap **52** and the containment pocket **82** can extend laterally outward of the proximal end **64***a* of the containment flap **52**. Such a configuration provides waist containment member **54** with a wide containment pocket **82** to contain and/or absorb body exudates.

Once exudates enter the containment pocket **82** provided by the waist containment member **54**, the waist containment member **54** can be configured to help retain the body exudates within the pocket **82**. For example, in some embodiments, the waist containment member **54** can include a first longitudinal tack-down region **84***a* and a second longitudinal tack-down region **84***b*. The waist containment

member **54** can additionally or alternatively include a first lateral tack-down region **83***a* and a second lateral tack-down region **83***b*, as illustrated in FIGS. **2** and **7**.

The first and second longitudinal tack-down regions **84***a*, **84***b* can help prevent lateral flow of body exudates that enter the containment pocket **82** of the waist containment member **54**. The longitudinal tack-down regions **84***a*, **84***b* can be formed by coupling the intermediate portion **77** to the proximal portion **76** of the waist containment member **54** and/or the body facing surface **19** of the chassis **11** and/or the distal portion **78** of the waist containment member **54** and by coupling the distal portion **78** of the waist containment member to the body facing surface **19** of the chassis **11** near the first and second longitudinal side edges **72**, **74**, respectively, of the waist containment member **54**. For example, FIGS. **2**, **4**, and **7** illustrate several short, transverse lines of adhesive **81***a*, **81***b* along the longitudinal side edges **72**, **74** that can help provide for the longitudinal tack-down regions **84***a*, **84***b*. As best illustrated in the cross-sectional view of FIG. **4**, the adhesive **81***b* can couple the distal portion **78** to the body facing surface **19** of the chassis **11**. The adhesive **81***a* can couple the intermediate portion **77** of the waist containment member **54** to the distal portion **78** of the waist containment member **54** and/or to the body facing surface **19** of the chassis **11** and/or to the proximal portion **76** of the waist containment member **54**. Although the lines of adhesive **81***a* are shown as intermittent in the longitudinal direction **30** near each of the longitudinal side edges **72**, **74** in that the adhesive **81***a* does not extend continuously from the lower lateral edge **88** to the upper lateral edge **75** of the waist containment member **54**, it is contemplated that the adhesive **81***a* could be in a continuous fashion in the longitudinal direction **30**. Additionally, it is contemplated that the longitudinal tack-down regions **84***a*, **84***b* could be provided by other means of bonding other than adhesives **81***a*, **81***b*, including pressure bonding, thermal bonding, ultrasonic bonding, and combinations thereof.

The first lateral tack-down region **83***a* and the second lateral tack-down region **83***b* can help prevent the longitudinal flow of body exudates that that enter the containment pocket **82** of the waist containment member **54**. The first lateral tack-down region **83***a* and the second lateral tack-down region **83***b* can also help form part of the first and second longitudinal tack-down regions **84***a*, **84***b*, respectively. The first lateral tack-down region **83***a* can include the distal portion **78** of the waist containment member **54** being coupled to the body facing surface **19** of the chassis **11** from the first longitudinal side edge **72** towards the lateral axis **29** of the absorbent article **10**, **110**. In preferred embodiments that include containment flaps **50**, **52**, the first lateral tack-down region **83***a* can include the distal portion **78** of the waist containment member **54** being coupled to the body facing surface **19** of the chassis **11** from the first longitudinal side edge **72** towards the proximal end **64***a* of the base portion **64** of the containment flap **50**. The second lateral tack-down region **83***b* can include the distal portion **78** of the waist containment member **54** being coupled to the body facing surface **19** of the chassis **11** from the second longitudinal side edge **74** towards the lateral axis **29** of the absorbent article **10**, **110**. In preferred embodiments that include containment flaps **50**, **52**, the second lateral tack-down region **83***b* can include the distal portion **78** of the waist containment member **54** being coupled to the body facing surface **19** of the chassis **11** from the second longitudinal side edge **74** towards the proximal end **64***a* of the base portion **64** of the containment flap **52**.

In some embodiments, the first and second lateral tack-down regions **83***a*, **83***b* can be configured such that the distal portion **78** of the waist containment member **54** can be coupled to the respective containment flaps **50**, **52**. In some embodiments, the first lateral tack-down region **83***a* laterally extends to at least the proximal end **64***a* of the base portion **64** of the containment flap **50**, and more preferably, to the projection portion **66** of the containment flap **50** (as illustrated in FIGS. **2** and **7**). In some embodiments, the second lateral tack-down region **83***b* laterally extends to at least the proximal end **64***a* of the base portion **64** of the containment flap **52**, and more preferably, to the projection portion **66** of the containment flap **52** (as illustrated in FIGS. **2** and **7**). Thus, the distal portion **78** of the waist containment member **54** can be coupled to the base portion **64** of each containment flap **50**, **52**.

The first and second lateral tack-down regions **83***a*, **83***b* can couple the distal portion **78** of the waist containment member **54** to the body facing surface **19** of the chassis **11** with an adhesive as shown in FIGS. **2**, **4**, **5**A-**5**F, and **7**. However, it is contemplated that other method of coupling could be used to form the first and second lateral tack-down regions **83***a*, **83***b*, including pressure bonding, thermal bonding, ultrasonic bonding, and combinations thereof.

As illustrated in FIGS. **2** and **7**, the first and second lateral tack-down regions **83***a*, **83***b* do not extend across the entire width **51** of the waist containment member **54**. Instead, a gap **89** is provided in the lateral direction **32** between the first and second lateral tack-down regions **83***a*, **83***b*. As illustrated in FIG. **3**, the gap **89** can provide an entrance for body exudates to enter the containment pocket **82** created by the waist containment member **54**. In some embodiments, the gap **89** between the first and second lateral tack-down regions **83***a*, **83***b* can be equal to the distance between the projection portions **66** of the containment flaps **50**, **52**.

As illustrated in FIGS. **2**, **4**, and **7**, the first lateral tack-down region **83***a* can be located away from the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. Similarly, the second lateral tack-down region **83***b* can be located away from the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. In other words, the first and second lateral tack-down regions **83***a*, **83***b* do not extend to the lower lateral edge **88** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. In a preferred embodiment, the first lateral tack-down region **83***a* and the second lateral tack-down region **83***b* are disposed at least about 3.0 mm away from the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. In other embodiments, the first and second lateral tack-down regions **83***a*, **83***b* can be located at least about 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, or 30.0 mm or more away from the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. Of course, it is contemplated that the first and second lateral tack-down regions **83***a*, **83***b* can be located a further distance away from the lower lateral edge **88** of the waist containment member **54** than this exemplary range. By configuring the first and second lateral tack-down regions **83***a*, **83***b* to be disposed away from the lower lateral edge **88** of the waist containment member **54**, the waist containment member **54** is able to provide more void volume near the longitudinal sides **72**, **74** of the waist

containment member **54** when the absorbent article **10**, **110** is in the relaxed configuration as illustrated in FIGS. **3** and **5**A-**5**E.

For example, as illustrated in FIG. **5**A, by locating the distal portion **78** of the waist containment member **54** underneath the intermediate portion **77** and disposing the first and second lateral tack-down regions **83***a*, **83***b* away from the lower lateral edge **88** of the waist containment member **54**, some of the distal portion **78** as well as the intermediate portion **77** can extend away from the body-facing surface **19** of the chassis **11** (e.g., the body-facing surface **56** of the bodyside liner **28**), when the absorbent article **10** is in the relaxed configuration, such as when the absorbent article **10** is placed on the wearer. In other words, by folding the distal portion **78** underneath the intermediate portion **77** by fold **79***b*, the waist containment member **54** is gathered in the longitudinal direction **30** such that the waist containment member **54** can extend away from the body facing surface **19** of the chassis **11** to provide a containment pocket **82** for containing exudates between the first lateral tack-down region **83***a* and the upper lateral edge **75** of the waist containment member **54** and between the second lateral tack-down region and between the upper lateral edge **75** of the waist containment member **54**.

Another way to achieve the increased void volume of the containment pocket **82** created by the waist containment member **554** is illustrated in the alternative embodiment of FIG. **5**F. The waist containment member **554** of FIG. **5**F is comprised of a single layer of material that wraps seven elastic members **86** to form a laminate. Rather than folding the waist containment member **554** to provide a distal portion **78** that is disposed underneath the intermediate portion **77** to gather the waist containment member **554** to provide void volume, the waist containment member **554** in FIG. **5**F gathers, or scrunches, the material forming the waist containment member **554** in the longitudinal direction **30** without folding the distal portion **78** of the waist containment member **554** underneath the intermediate portion **77** of the waist containment member **554**. As illustrated in FIG. **5**F, the waist containment member **554** can still include lateral tack-down regions **83***a*, **83***b* (**83***b* not shown), but the lateral tack-down regions **83***a*, **83***b* are preferably located at the lower lateral edge **88** of the waist containment member **554**, not away from the lower lateral edge **88** of the waist containment member **554** such as described above with respect to the embodiments disclosed in FIGS. **5**A-**5**E. The material forming the waist containment member **554** can be gathered as illustrated in FIG. **5**F by mechanical gathering the material before coupling it to the body facing surface **19** of the chassis **11** or by stretching the material forming the waist containment member **554** in the longitudinal direction **30** prior to coupling the waist containment member **554** to the body facing surface **19** of the chassis **11**. Either way, the waist containment member **554** can create additional void volume for the containment pocket **82** without disposing the distal portion **78** of the waist containment member **554** underneath the intermediate portion **77**, as in other embodiments discussed herein.

As illustrated in FIGS. **5**A-**5**E, the waist containment member **54**, **154**, **254**, **354**, **454**, including a proximal portion **76**, an intermediate portion **77**, and a distal portion **78** disposed underneath the intermediate portion **77**, can be formed in various configurations. For example, the waist containment members **54**, **154**, and **454** as illustrated in FIGS. **5**A, **5**B, and **5**E, respectively, can be formed from a single piece of material. Alternatively, the waist containment members **254**, **354** as illustrated in FIGS. **5**C and **5**D, respectively, can be formed from more than one piece of material.

For example, the waist containment member **254** shown in FIG. **5**C includes one piece of material forming the distal portion **78**, with another piece of material forming the intermediate portion **77** and the proximal portion **76**, the material forming the intermediate portion **77** being folded over upon itself to envelope elastic members **86**. The two pieces of material of the waist containment member **254** can be joined with an adhesive **87**, such as near fold **79***b*. As illustrated in FIG. **5**D, waist containment member **354** includes two different pieces of material that overlap one another to form the intermediate portion **77** and laminate elastic members **86**. The two pieces of material in the waist containment member **354** can be joined by adhesive (not shown) covering the elastic members **86** as is known in the art. By having the waist containment member **254**, **254** be formed from two different pieces of material, the different pieces of material can be configured to provide different properties according to desired functions. For example, in the embodiments illustrated in FIGS. **5**C and **5**D, the material forming the proximal portion **76** and the intermediate portion **77** can be selected to have properties of greater softness as compared to the material forming the distal portion **76**, since the material forming the proximal portion **76** and the intermediate portion **77** can have more contact with the wearer's skin.

In the embodiments illustrated in FIGS. **5**A-**5**E, the waist containment members **54**, **154**, **254**, **354**, **454** all have an intermediate portion **77** that is thicker than the proximal portion **76**. Such a configuration provides the benefit of reducing strike-through of body exudates from the containment pocket **82** through the material(s) forming the intermediate portion **77**, yet reduces the amount of material(s) at the proximal portion **76** where such thickness is not necessary. For example, the waist containment members **54**, **254**, and **354** of FIGS. **5**A, **5**C, and **5**D, respectively, have twice the thickness in the intermediate portion **77** as compared to the thickness of the proximal portion **76**. The waist containment members **154** and **454** of FIGS. **5**B and **5**E, respectively, have triple the thickness as compared to the thickness of the proximal portion **76**. The additional thickness in the intermediate portion **77** as compared to the proximal portion **76** can also provide the benefit of additional softness of the waist containment member **54**, **154**, **254**, **354**, **454** against the wearer's skin. Yet another benefit of additional thickness in the intermediate portion **77** is increased opacity towards the containment pocket **82** formed by the waist containment member **54**, **154**, **254**, **354**, **454**, which can provide the desirable benefit of masking the presence of body exudates when the absorbent article **10**, **110** is being changed by the wearer or a caregiver.

In preferred embodiments, and as illustrated in FIGS. **2**, **5**A-**5**F, and **7**, the first and second lateral tack-down regions **83***a*, **83***b* of the waist containment members **54**, **154**, **254**, **354**, **454**, **554** can synergistically work with the containment flaps **50**, **52** to better guide and contain body exudates within the containment pocket **82**. As previously noted, the first and second lateral tack-down regions **83***a*, **83***b* preferably extend at least to the proximal end **64***a* of the base portion **64** of the respective containment flaps **50**, **52**, and more preferably, extend to the projection portion **66** of the respective containment flaps **50**, **52**. In doing so, the containment flaps **50**, **52** can guide body exudates into the containment pocket **82**, and the first and second lateral tack-down regions **83***a*, **83***b* can act as longitudinal barriers preventing the body exudates

from escaping from the containment pocket **82** if and when the body exudates disperse laterally outside of the projection portions **66** of the containment flaps **50**, **52** once within the containment pocket **82**.

Additionally or alternatively, the tack-down regions **71** of the containment flaps **50**, **52** can be configured to not extend to the lower lateral edge **88** of the waist containment member **54**, **154**, **254**, **354**, **454**, **554**, thus allowing the projection portion **66** of each of the containment flaps **50**, **52** to extend away from the body facing surface **19** of the chassis **11** and guide the body exudates longitudinally further into the containment pocket **82**. By keeping the tack-down regions **71** away from the lower lateral edge **88** of the waist containment member **54**, **154**, **254**, **354**, **454**, **554**, the active flap elastic region **70** of the containment flaps **50**, **52** can extend into the containment pocket **82**, and more preferably, can extend to the first and second lateral tack-down regions **83***a*, **83***b*, as illustrated in FIGS. **2**, **5**A, and **7**. In such configurations, the active flap elastic region **70** of each containment flap **50**, **52** can provide a lifting force on the waist containment member **54**, **154**, **254**, **354**, **454**, **554** to help the waist containment member **54**, **154**, **254**, **354**, **454**, **554** extend away from the body facing surface **19** of the chassis **11** to provide more void volume and a more open containment pocket **82** for body exudates to enter, and the first and second lateral tack-down regions **83***a*, **83***b* can provide the longitudinal barrier to body exudates once the body exudates have entered the containment pocket **82**.

In preferred embodiments, the waist containment member **54** can include at least one elastic member **86**. In some embodiments, such as the embodiments depicted in FIG. **5**A, the waist containment member **54** can include multiple elastic members **86**, such as eight elastic members **86** (only one of the elastic members **86** is labeled in FIG. **5**A for purposes of clarity). The waist containment members **154**, **254**, **354**, **454**, **554** of FIGS. **5**B-**5**F include multiple elastic members **86** (only one elastic member **86** is labeled for purposes of clarity). Of course, it is contemplated that the waist containment member **54** can include other amounts of elastic members **86** other than eight, and in some embodiments, need not include any elastic members **86**. In some embodiments, the elastic members **86** can be spaced evenly in the longitudinal direction **30** of the waist containment member **54**. The elastic member **86** can span substantially from the first longitudinal side edge **72** to the second longitudinal side edge **74** of the waist containment member **54**. The elastic member **86** can be disposed in the intermediate portion **77** of the waist containment member **54** and be located near the lower lateral edge **88** of the waist containment member **54** when the absorbent article **10**, **110** is in the stretched, laid-flat configuration. Additionally or alternatively, the elastic member **86** can be located in a distal portion **78** of the waist containment member **54**, **454**, **554**, such as illustrated in FIGS. **5**A, **5**E, and **5**F.

A wide variety of elastic materials may be used for the elastic member(s) **86** in the waist containment member **54**. Suitable elastic materials can include sheets, strands or ribbons of natural rubber, synthetic rubber, elastic foams, or thermoplastic elastomeric materials (e.g., films). The elastic materials can be stretched and secured to a substrate forming the waist containment member **54**, secured to a gathered substrate, or secured to a substrate and then elasticized or shrunk, for example, with the application of heat, such that the elastic retractive forces are imparted to the substrate forming the waist containment member **54**.

As depicted in FIG. **2**, in some embodiments the waist containment member **54** can be disposed on the body facing surface **19** of the chassis **11** such that a gap **85** is provided between the second end edge **42** of the absorbent body **34** and the lower lateral edge **88** of the waist containment member **54**. By providing a gap **85**, the containment pocket **82** can have a greater void volume for body exudates. Additionally, it is believed that gap **85** can help body exudates enter the containment pocket **82** of the waist containment member **54**.

The waist containment member **54** can be comprised of a variety of materials. In a preferred embodiment, the waist containment member **54** can be comprised of a spunbond-meltblown-spunbond ("SMS") material. However it is contemplated that the waist containment member **54** can be comprised of other materials including, but not limited to, a spunbond-film-spunbond ("SFS"), a bonded carded web ("BCW"), or any non-woven material. In some embodiments, the waist containment member **54** can be comprised of a laminate of more than one of these exemplary materials, or other materials. In some embodiments, the waist containment member **54** can be comprised of a liquid impermeable material. In some embodiments, the waist containment member **54** can be comprised of a material coated with a hydrophobic coating. The basis weight of the material forming the waist containment member **54** can vary, however, in a preferred embodiment, the basis weight can be between about 8 gsm to about 120 gsm, not including the elastic members **86** in the waist containment member **54**. More preferably, the basis weight of the material comprising the waist containment member **54** can be between about 10 gsm to about 40 gsm, and even more preferably, between about 15 gsm to about 25 gsm.

Fastening System:

In an embodiment, the absorbent article **10** can include a fastening system. The fastening system can include one or more back fasteners **91** and one or more front fasteners **92**. The embodiments shown in FIGS. **1**, **2**, and **5** depict embodiments with one front fastener **92**. Portions of the fastening system may be included in the front waist region **12**, rear waist region **14**, or both.

The fastening system can be configured to secure the absorbent article **10** about the waist of the wearer in a fastened condition as shown in FIG. **1** and help maintain the absorbent article **10** in place during use. In an embodiment, the back fasteners **91** can include one or more materials bonded together to form a composite ear as is known in the art. For example, the composite fastener may be composed of a stretch component **94**, a nonwoven carrier or hook base **96**, and a fastening component **98**, as labeled in FIG. **2**. As shown in FIG. **5**B, in some embodiments the waist containment member **54** can extend to back fasteners **91**. In some embodiments, the waist containment member **54** can be coupled to the stretch component **94** of the back fasteners **91**, either directly or indirectly. In some embodiments, the waist containment member **54** can extend to the longitudinal side edges **18**, **20** of the absorbent article **10**.

Method of Manufacturing an Absorbent Article:

With reference to FIGS. **8** and **9**, an exemplary method **610** of manufacturing an absorbent article **10** with a waist containment member **54** as depicted in FIGS. **1**-**5**A will now be described. The method **610** can include providing a chassis **11**, which can be in the form of a chassis web **611**. The chassis **11** (e.g., chassis web **611**) can include an absorbent assembly **44**. The absorbent assembly **44** can be in a discrete form of the chassis **11** for an absorbent article **10** as discussed above, or can be provided in form of an absorbent assembly web **644** as part of a chassis web **611**. The absorbent assembly **44** (absorbent assembly web **644**)

can include a bodyside liner **28** and an outer cover **26**, which can be in web form as a bodyside liner web **628** and an outer cover web **626** as well. The absorbent assembly web **644** can include a body facing surface **645**.

The method **610** can include providing a pair of containment flaps **650**, **652**, as are discussed above, and that can each include a base portion **664** and a projection portion **666**. The method **610** can also include bonding the base portion **664** of each of the containment flaps **650**, **652** to the body facing surface **45** of the absorbent assembly **44** (e.g., the body facing surface **645** of the absorbent assembly web **644**). In some embodiments, bonding the base portion **664** of each of the containment flaps **650**, **652** to the body facing surface **45** of the absorbent assembly **44** can include bonding the base portion **664** of each of the containment flaps **650**, **652** to the bodyside liner **28** (e.g., bodyside liner web **628**). In other embodiments, bonding the base portion **664** of each of the containment flaps **650**, **652** to the body facing surface **45** of the absorbent assembly **44** can include bonding the base portion **664** of each of the containment flaps **650**, **652** to the outer cover **26** (e.g., outer cover web **626**). As noted above, the base portion **664** of each of the containment flaps **650**, **652** can include a proximal end **664***a* and a distal end **664***b*.

The method **610** can also include providing a continuous web of waist containment member material **654**. The continuous web of waist containment member material **654** can be guided over one or more idlers **661**, as are known in the art. The continuous web of waist containment member material **654** can be folded such that at least a portion **654***a* of the continuous web of waist containment member material **654** is folded upon itself. Folding the continuous web of waist containment member material **654** can provide a folded edge **679***b* that, once the continuous web of waist containment member material **654** is cut to form a waist containment member **54**, will separate the distal portion **78** of the waist containment member **54** from the intermediate portion **77** of the waist containment member **54** at fold **79***b*, as discussed above with respect to FIGS. **1-5**A. With such a fold, the distal portion **78** can be folded against the intermediate portion **77**. Folding the portion **654***a* of the continuous web of waist containment member material **654** can be accomplished with a folding board **688***b*, as is known in the art.

In some embodiments, the method **610** can also include folding a portion **654***b* of the continuous web of waist containment member material **654** upon itself to provide a folded edge **679***a*, that once the continuous web of waist containment member material **654** is cut to form a waist containment member **54**, will separate the intermediate portion **77** of the waist containment member **54** from the proximal portion **76** of the waist containment member **54** at fold **79***a*, as discussed above with respect to FIGS. **1-5**A. With such a fold, the proximal portion **76** can be folded against the intermediate portion **77**. Folding the portion **654***b* of the continuous web of waist containment member material **654** can be accomplished with a folding board **688***c*, as is known in the art.

In some embodiments, the method **610** can also include folding a portion **654***c* of the continuous web of waist containment member material **654** upon itself to cover elastic members **686** (as described below) and/or to form a greater thickness in the intermediate portion **77** of the waist containment member **54**, which is formed once the continuous web of waist containment member material **654** is cut. Folding the portion **654***c* of the continuous web of waist containment member material **654** can be accomplished with a folding board **688***a*, as is known in the art. As illustrated in FIGS. **8** and **9**, in this preferred embodiment, portion **654***c* can be folded first by folding board **688***a*, then portion **654***a* can be folded by folding board **688***b*, then portion **654***b* can be folded by folding board **688***c*.

In some embodiments, the method **610** can further include providing an elastic member **86**, which can be in the form of an elastic member web **686**. In some embodiments, more than one elastic member **86** can be provided. For example, in some embodiments, eight elastic member webs **686** can be provided. The elastic member web(s) **686** can be bonded to the continuous web of waist containment member material **654**. In one embodiment, an adhesive station **699***a* can apply an adhesive **687** (as shown in FIG. **9**) to the elastic member web(s) **686** to bond the elastic member web(s) **686** to the continuous web of waist containment member material **654**. The adhesive **687** can be applied in a spray fashion, or in any other suitable fashion. In some embodiments, the adhesive **687** could be applied to the continuous web of waist containment member material **654** in addition to or in the place of applying the adhesive **687** to the elastic member web(s) **686**. Folding a portion **654***c* of the continuous web of waist containment member material **654** upon itself with folding board **688***a* can provide for wrapping the elastic member web(s) **686**, as discussed above.

The method **610** can also include providing an intermittent adhesive **681***a* to the continuous web of waist containment member material **654**. In one embodiment, the intermittent adhesive **681***a* can be applied intermittently to the continuous web of waist containment member material **654** by pulsing multiple lines of adhesive **681***a* with an adhesive station **699***b*. As previously mentioned, it is contemplated that the intermittent adhesive **681***a* could be applied as a singular continuous adhesive across the width of the continuous web of waist containment member material **654**, rather than in discrete segments as shown in FIG. **9**.

The method **610** can also include providing an intermittent adhesive **681***b* to the continuous web of waist containment member material **654**. The intermittent adhesive **681***b* can be applied to the folded portion **654***a* near folded edge **679***b* and can be applied by adhesive station **699***c*. Along with intermittent adhesive **681***a*, the intermittent adhesive **681***b* can help form the longitudinal tack-down regions **84***a*, **84***b*, as previously discussed with respect to FIGS. **2**, **4**, and **7**, once the continuous web of waist containment member material **654** is cut to form a web containment member **54**.

The method **610** can also include applying intermittent adhesive **683** to the continuous web of waist containment member material **654**. The intermittent adhesive **683** can also be applied by adhesive station **699***c*, or can be applied by its own adhesive station. Importantly, the adhesive **683** can be applied away from the folded edge **679***b* of the continuous web of the waist containment member material **654**, which once the continuous web of waist containment member material **654** is cut and applied to the chassis **11** to form a waist containment member **54**, the adhesive **683** will form the lateral tack-down regions **83***a*, **83***b* of the waist containment member **54**. In other words, the adhesive **683** does not extend to the folded edge **679***b* of the continuous web of the waist containment member material **654**. It can also be seen that the intermittent adhesive **683** can be applied for a longer length than the intermittent adhesives **681***a*, **681***b*. Because the intermittent adhesive **683** can be applied to the continuous web of waist containment member material **654** such that once the continuous web of waist containment member material **654** is cut the intermittent adhesive **683** will be near the longitudinal side edges **72**, **74** of

the waist containment member **54**, the adhesive **683** can also help form the longitudinal tack-down regions **84***a*, **84***b* along with the intermittent adhesives **681***a*, **681***b* discussed above.

It is contemplated that one or more of the adhesives **681***a*, **681***b*, and **683** could be substituted for other bonding methods to bond the respective portions of the waist containment member **54** to the chassis **11**. For example, it is contemplated that the intermittent adhesive **681***a* and **681***b* could be substituted with a bonding unit that would intermittently bond the continuous web of waist containment member material **654** to itself and to the chassis **11** to form the longitudinal tack-down regions **84***a*, **84***b* discussed above. Furthermore, it is also contemplated that the lateral tack-down regions **83***a*, **83***b* could be formed by bonding the waist containment member **54** to the chassis **11** as described above via pressure bonding, thermal bonding, ultrasonic bonding, other combinations thereof, after the continuous web of waist containment member material **654** is cut to form the waist containment member **54** and is applied to the chassis **11**.

In some embodiments, the method **610** can further include applying an adhesive **680** to the continuous web of waist containment member material **654**. Adhesive **680** can be applied via adhesive station **699***d* and can be applied to the portion **654***b* of the continuous web of the waist containment member material **654** that is folded, and that once cut, will form the proximal portion **76** of the waist containment member **54**. The adhesive **680** can bond the waist containment member **54** to the chassis **11** of the absorbent article **10** (e.g., the chassis web **611**), as discussed further below.

The method **610** can additionally include cutting the continuous web of waist containment member material **654** into a discrete waist containment member **54**. As illustrated in FIG. **8**, the continuous web of waist containment member material **654** can be cut by a knife roll **693** including one or more knives **693***a* (two are shown in FIG. **8**) and an anvil roll **695**, as is known in the art. The anvil roll **695** can supply a vacuum pressure (i.e., a negative pressure) through one or more holes in the outer surface of the anvil roll **695** to help secure the continuous web of waist containment member material **654** to the anvil roll **695**. The continuous web of waist containment member material **654** can be delivered to the anvil roll **695** at any suitable rate. As depicted in FIG. **9**, the continuous web of waist containment member material **654** can be cut near the middle of where the intermittent adhesives **681***a*, **681***b* and intermittent adhesive **683** are applied to provide the longitudinal tack-down regions **84***a*, **84***b* and the lateral tack-down regions **83***a*, **83***b* for the waist containment member **54** near the first longitudinal side edge **72** and the second longitudinal side edge **74** in adjacent waist containment members **54**.

The knife roll **693** and anvil roll **695** can cut the continuous web of waist containment member material **654** completely when each knife **693***a* comes into contact with the anvil roll **695**. Alternatively, the knife roll **693** and the anvil roll **695** can be configured to perforate the continuous web of waist containment member material **654**, in which case the continuous web of waist containment member material **654** can be cut at the perforations by a further separating force at a rotating module **602**, which is described further below. Cutting the continuous web of waist containment member material **654** can provide a waist containment member **54** with a proximal portion **76**, an intermediate portion **77**, a distal portion **78**, a first longitudinal side edge **72**, a second longitudinal side edge **74**, an upper lateral edge **75**, and a lower lateral edge **88** as illustrated in FIG. **9**.

In some embodiments where an absorbent article **10** is manufactured in a machine direction process, the method **610** can include rotating the waist containment member **54** about 90 degrees after cutting the waist containment member **54** from the continuous web of waist containment member material **654**. For example, in a preferred embodiment, a rotating module **602** can rotate the waist containment member **54**. The general construction and operation of such a rotating module **602** is well known and is exemplified by U.S. Pat. Nos. 5,716,478 and 5,759,340 issued to Boothe et al. and U.S. Pat. No. 6,139,004 issued to Couillard et al., each of which is incorporated herein by reference in its entirety to the extent not inconsistent herewith. The rotating module **602** can include a plurality of transfer arms **604** (twelve transfer arms **604** are shown in FIG. **8**) and a plurality of transfer pucks **606** (twelve transfer pucks **606** are shown in FIG. **8**). The rotating module **602** can include a rotating means **607**, such as a shaft **607***a* that can be directly or indirectly driven by a drive motor or other suitable means (not shown) as is conventionally used for such equipment. Thus, the rotation shaft **607***a* can propel the transfer arms **604** about an axis such that the transfer pucks **606** can transfer the waist containment members **54** from the anvil roll **695** to the chassis **11** (e.g., chassis web **611**). If the knife roll **693** and anvil roll **695** are configured to perforate the continuous web of waist containment member material **654**, the rotating module **602** can be configured to cut the continuous web of waist containment member material **654** at the perforations made by the knife roll **693** by applying a force to the continuous web of waist containment member material **654** when a transfer puck **606** picks up the continuous web of waist containment member material **654** and begins to transfer the continuous web of waist containment member material **654** at a faster speed than the anvil roll **695**.

Each of the transfer pucks **606** can be coupled to a respective transfer arm **604**. The transfer pucks **606** can be equipped with conventional vacuum assist or other means (not shown) to allow the transfer pucks **606** to pick up the waist containment members **54** (or continuous web of waist containment member material **654**) from the knife roll **693** and the anvil roll **695**. Each of the transfer pucks **606** is equipped with conventional means to pivot about the longitudinal axis of the respective transfer arm **604** so that each of the transfer pucks **606** are rotatable or pivotable between a first position when the transfer pucks **606** first receive the waist containment member **54** (or the continuous web of waist containment member material **654**), such as shown by transfer puck **606***a* in FIG. **8**, and a second position where the transfer pucks **606** transfer the waist containment member **54** to the chassis **11** (e.g., the chassis web **611**), such as shown by transfer puck **606***b*. The transfer pucks **606** can rotate 90° from the first position (such as shown by transfer puck **606***a*) to the second position (such as shown by transfer puck **606***b*).

As illustrated in FIGS. **8** and **9**, the waist containment member **54** is rotated about 90° by the rotating module **602** prior to bonding the waist containment member **54** to the chassis **11** (e.g., chassis web **611**) to form containment member **54** on the absorbent article **10**. It is contemplated, however, that in some embodiments no rotation of the waist containment member **54** is necessary. For example, if a cross-direction manufacturing process is utilized to provide an absorbent article, such as the absorbent article **110** of FIGS. **6** and **7** as discussed herein, then no rotation of the waist containment member **54** may be included in method **610**.

The method **610** can also include bonding the waist containment member **54** to the chassis **11** (e.g., chassis web **611**). The waist containment member **54** can be bonded to the chassis **11** (e.g., chassis web **611**) by the adhesive **680** applied to the portion **654***b* of the continuous web of waist containment member material **654**. The waist containment member **54** can also be bonded to the chassis **11** (e.g., chassis web **611**) by the intermittent adhesives **681***a*, **681***b* and intermittent adhesive **683**, which form the longitudinal tack-down regions **84***a*, **84***b* and the lateral tack-down regions **83***a*, **83***b*, as discussed above. The waist containment member **54** can be bonded to the body facing surface **19** of the chassis **11** (e.g., chassis web **311**). In some embodiments, the waist containment member **54** can be bonded to the body facing surface **45** of the absorbent assembly **44** (e.g., the body facing surface **645** of the absorbent assembly web **644**). As discussed above, the distal portion **78** of the waist containment member **54** can be bonded to the body facing surface **19** of the chassis **11** to provide a first lateral tack-down region **83***a* near the first longitudinal side edge **72** and a second lateral tack-down region **83***b* near the second longitudinal side edge **74** of the waist containment member **54** (e.g., with adhesive **683**). The distal portion **78** of the waist containment member **54** can be bonded to the body facing surface **19** of the chassis **11** such that the first and second lateral tack-down regions **83***a*, **83***b* are at least about 3.0 mm away from the lower lateral edge **88** of the waist containment member **54**, when the absorbent article **10** is in the stretched, laid-flat configuration. Of course, the positioning of the adhesive **683** can be adjusted with respect to the folded edge **679***b* of the continuous web of waist containment member material **654** such that the first and second lateral tack-down regions **83***a*, **83***b* are disposed more than about 3.0 mm away from the lower lateral edge **88** of the waist containment member **54**, as discussed above.

The adhesive **683** can be applied to the continuous web of the waist containment member material **654** such that the spacing between consecutive adhesives **683** will form lateral tack-down regions **83***a*, **83***b* that bond the distal portion **78** of the waist containment member **54** to the body facing surface **19** of the chassis **11** from the first longitudinal side edge **72** of the waist containment member **54** to at least the proximal end **64***a* of the base portion **64** of the first containment flap **50** and will bond the distal portion **78** of the waist containment member **54** to the body facing surface **19** of the chassis **11** from the second longitudinal side edge **74** of the waist containment member **54** to at least the proximal end **64***a* of the base portion **64** of the second containment flap **52**. More preferably, the adhesive **683** can be spaced such that the spacing between consecutive adhesives **683** will form lateral tack-down regions **83***a*, **83***b* that bond the distal portion **78** of the waist containment member **54** to the body facing surface **19** of the chassis **11** from the first longitudinal side edge **72** of the waist containment member **54** to the projection portion **66** of the first containment flap **50** and will bond the distal portion **78** of the waist containment member **54** to the body facing surface **19** of the chassis **11** from the second longitudinal side edge **74** of the waist containment member **54** to the projection portion **66** of the second containment flap **52**.

If the chassis **11** is provided in the form of a chassis web **611**, the method **610** can also include cutting the chassis web **611** to form individual absorbent articles. In one embodiment, cutting the chassis web **611** can be done with a cutoff module (not shown) as is known in the art.

EMBODIMENTS

Embodiment 1

An absorbent article including a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis, the absorbent article comprising: a chassis including an absorbent body, the chassis including a body facing surface and a garment facing surface; a waist containment member disposed on the body facing surface of the chassis, the waist containment member comprising: a first longitudinal side edge and a second longitudinal side edge, the first longitudinal side edge being disposed on a first side of the longitudinal axis and the second longitudinal edge being disposed on a second side of the longitudinal axis; an upper lateral edge and a lower lateral edge, the first longitudinal side edge, the second longitudinal side edge, the upper lateral edge and the lower lateral edge of the waist containment member being defined when the absorbent article is in a stretched laid-flat configuration; a proximal portion, the proximal portion being coupled to the body facing surface of the chassis; a distal portion; and an intermediate portion, the intermediate portion being disposed between the proximal portion and the distal portion, the intermediate portion being free to move independent of the proximal portion and the distal portion and free to move independent of the body facing surface of the chassis to provide a containment pocket for containing body exudates; the distal portion being disposed underneath the intermediate portion when the absorbent article is in the stretched laid-flat configuration.

Embodiment 2

The absorbent article of embodiment 1, further comprising: a pair of containment flaps including a first containment flap and a second containment flap, the first containment flap being on the first side of the longitudinal axis and the second containment flap being on the second side of the longitudinal axis, the first and second containment flap each comprising: a base portion including a proximal end and a distal end; and a projection portion configured to extend away from the body facing surface of the chassis in at least the crotch region when the absorbent article is in a relaxed configuration.

Embodiment 3

The absorbent article of embodiment 2, wherein the waist containment member further comprises a first lateral tack-down region and a second lateral tack-down region, the first lateral tack-down region comprising the distal portion of the waist containment member on the first side of the longitudinal axis being coupled to the body facing surface of the chassis from the first longitudinal side edge to at least the proximal end of the base portion of the first containment flap and the second lateral tack-down region comprising the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge to at least the proximal end of the base portion of the second containment flap.

Embodiment 4

The absorbent article of any one of embodiments 2 or 3, wherein the distal portion of the waist containment member is coupled to the base portion of the first and second containment flaps.

Embodiment 5

The absorbent article of embodiment 3, wherein the first lateral tack-down region and the second lateral tack-down region of the waist containment member are each disposed at least 3.0 mm away from the lower lateral edge of the waist containment member when the absorbent article is in the stretched laid-flat configuration.

Embodiment 6

The absorbent article of any one of the preceding embodiments, wherein the waist containment member further comprises at least one elastic member in the intermediate portion of the waist containment member.

Embodiment 7

The absorbent article of embodiment 6, wherein the waist containment member further comprises at least one elastic member in the distal portion of the waist containment member.

Embodiment 8

The absorbent article of any one of the preceding embodiments, wherein the waist containment member is a single component and further comprises a first fold between the proximal portion and the intermediate portion defining the upper lateral edge of the waist containment member, and a second fold in the intermediate portion defining the lower lateral edge of the waist containment member.

Embodiment 9

The absorbent article of any one of the preceding embodiments, wherein the intermediate portion is thicker than the proximal portion of the waist containment member.

Embodiment 10

An absorbent article including a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis, the absorbent article comprising: a chassis including an absorbent body, the chassis including a body facing surface and a garment facing surface; a waist containment member disposed on the body facing surface of the chassis, the waist containment member comprising: a first longitudinal side edge and a second longitudinal side edge, the first longitudinal side edge being disposed on a first side of the longitudinal axis and the second longitudinal edge being disposed on a second side of the longitudinal axis; an upper lateral edge and a lower lateral edge, the first longitudinal side edge, the second longitudinal side edge, the upper lateral edge and the lower lateral edge of the waist containment member being defined when the absorbent article is in a stretched laid-flat configuration; a proximal portion, the proximal portion being coupled to the body facing surface of the chassis; a distal portion; and a first lateral tack-down region and a second lateral tack-down region, the first lateral tack-down region including the distal portion of the waist containment member on the first side of the longitudinal axis being coupled to the body facing surface of the chassis from the first longitudinal side edge in a lateral direction towards the proximal end of the base portion of the first containment flap and the second lateral tack-down region including the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge in a lateral direction towards the proximal end of the base portion of the second containment flap, wherein the waist containment member is gathered in the longitudinal direction such that the waist containment member can extend away from the body facing surface of the chassis to provide a containment pocket for containing exudates between the first lateral tack-down region and the upper lateral edge of the waist containment member and between the second lateral tack-down region and the upper lateral edge of the waist containment member.

Embodiment 11

The absorbent article of embodiment 10, wherein the waist containment member further comprises: a first longitudinal tack-down region and a second longitudinal tack-down region, the first longitudinal tack-down region being disposed near the first longitudinal side edge of the waist containment member and the second longitudinal tack-down region being disposed near the second longitudinal side edge of the waist containment member.

Embodiment 12

The absorbent article of embodiment 10 or embodiment 11, further comprising: a pair of containment flaps including a first containment flap and a second containment flap, the first containment flap being on the first side of the longitudinal axis and the second containment flap being on the second side of the longitudinal axis, the first and second containment flap each comprising: a base portion including a proximal end and a distal end; and a projection portion configured to extend away from the body facing surface of the chassis in at least the crotch region when the absorbent article is in a relaxed configuration.

Embodiment 13

The absorbent article of embodiment 12, wherein the first lateral tack-down region extends from the first longitudinal side edge of the waist containment member to at least the proximal end of the base portion of the first containment flap and the second lateral tack-down region extends from the second longitudinal side edge of the waist containment member to at least the proximal end of the base portion of the second containment flap.

Embodiment 14

The absorbent article of any one of embodiments 10-13, wherein the distal portion of the waist containment member is gathered in the longitudinal direction to provide the void volume.

Embodiment 15

The absorbent article of any one of embodiments 10-14, wherein the waist containment member further comprises an intermediate portion, the intermediate portion being disposed between the proximal portion and the distal portion, the intermediate portion being free to move independent of the proximal portion and the distal portion; the distal portion being gathered in the longitudinal direction by being dis-

posed underneath the intermediate portion when the absorbent article is in the stretched laid-flat configuration.

Embodiment 16

The absorbent article of embodiment 15, wherein the first lateral tack-down and the second lateral tack-down are each disposed at least 3.0 mm away from the lower lateral edge of the waist containment member to provide the void volume when the absorbent article is in the stretched laid-flat configuration.

Embodiment 17

A method of manufacturing an absorbent article, the absorbent article including a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis, the method comprising: providing a chassis including a body facing surface, the chassis comprising an absorbent assembly including a bodyside liner, an outer cover, and an absorbent body disposed between the bodyside liner and the outer cover, the absorbent assembly including a body facing surface; providing a continuous web of waist containment member material; folding at least a first portion of the continuous web of waist containment member material upon itself to provide a folded edge; cutting the continuous web of waist containment member material to provide a waist containment member including a proximal portion, an intermediate portion, a distal portion, a first longitudinal side edge, a second longitudinal side edge, an upper lateral edge, and a lower lateral edge, wherein the folded edge provides the distal portion to be folded against the intermediate portion and the folded edge defines the lower lateral edge of the waist containment member, the intermediate portion being disposed between the proximal portion and the distal portion; bonding the proximal portion of the waist containment member to the body facing surface of the chassis; bonding the distal portion of the waist containment member to the body facing surface of the chassis to provide a first lateral tack-down region near the first longitudinal side edge of the waist containment member and a second lateral tack-down region near the second longitudinal side edge of the waist containment member, the first lateral tack-down region and the second lateral tack-down region being formed such that the first lateral tack-down region and the second lateral tack-down region of the waist containment member are disposed away from the lower lateral edge of the waist containment member when the absorbent article is in the stretched laid-flat configuration.

Embodiment 18

The method of manufacturing an absorbent article of embodiment 17, further comprising bonding the waist containment member to the body facing surface of the chassis to provide a first longitudinal tack-down region near the first longitudinal side edge and a second longitudinal tack-down region near the second longitudinal side edge.

Embodiment 19

The method of manufacturing an absorbent article of embodiment 17 or embodiment 18, further comprising: providing a pair of containment flaps including a first containment flap and a second containment flap, the first containment flap and the second containment flap each including a base portion and a projection portion; and bonding the base portion of each of the first and the second containment flaps to the body facing surface of the absorbent assembly, the base portion of each of the first and the second containment flaps each including a proximal end and a distal end.

Embodiment 20

The method of manufacturing an absorbent article of embodiment 19, wherein the first lateral tack-down region comprises the distal portion of the waist containment member being coupled to the body facing surface of the chassis from the first longitudinal side edge to at least the proximal end of the base portion of the first containment flap and the second lateral tack-down region comprises the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge to at least the proximal end of the base portion of the second containment flap.

Embodiment 21

The method of manufacturing an absorbent article of claim **17**, further comprising: folding at least a second portion of the continuous web of waist containment member material upon itself to provide a second folded edge, the second folded edge defining the upper lateral edge of the waist containment member when the absorbent article is in the stretched laid-flat configuration.

All documents cited in the Detailed Description are, in relevant part, incorporated herein by reference; the citation of any document is not to be construed as an admission that it is prior art with respect to the present invention. To the extent that any meaning or definition of a term in this written document conflicts with any meaning or definition of the term in a document incorporated by references, the meaning or definition assigned to the term in this written document shall govern.

While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

What is claimed is:

1. An absorbent article including a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis, the absorbent article comprising:

a chassis including an absorbent body, the chassis including a body facing surface and a garment facing surface;

a waist containment member disposed on the body facing surface of the chassis, the waist containment member comprising:

a first longitudinal side edge and a second longitudinal side edge, the first longitudinal side edge being disposed on a first side of the longitudinal axis and the second longitudinal edge being disposed on a second side of the longitudinal axis;

an upper lateral edge and a lower lateral edge, the first longitudinal side edge, the second longitudinal side edge, the upper lateral edge and the lower lateral edge of the waist containment member being defined when the absorbent article is in a stretched laid-flat configuration;

a proximal portion, the proximal portion being coupled to the body facing surface of the chassis;

a distal portion;

an intermediate portion, the intermediate portion being disposed between the proximal portion and the distal portion, the intermediate portion being free to move independent of the proximal portion and the distal portion and free to move independent of the body facing surface of the chassis to provide a containment pocket for containing body exudates; the distal portion being disposed underneath the intermediate portion when the absorbent article is in the stretched laid-flat configuration; and

a first fold between the proximal portion and the intermediate portion defining the upper lateral edge of the waist containment member.

2. The absorbent article of claim **1**, further comprising:

a pair of containment flaps including a first containment flap and a second containment flap, the first containment flap being on the first side of the longitudinal axis and the second containment flap being on the second side of the longitudinal axis, the first and second containment flap each comprising:

a base portion including a proximal end and a distal end; and

a projection portion configured to extend away from the body facing surface of the chassis in at least the crotch region when the absorbent article is in a relaxed configuration.

3. The absorbent article of claim **2**, wherein the waist containment member further comprises a first lateral tack-down region and a second lateral tack-down region, the first lateral tack-down region comprising the distal portion of the waist containment member on the first side of the longitudinal axis being coupled to the body facing surface of the chassis from the first longitudinal side edge to at least the proximal end of the base portion of the first containment flap and the second lateral tack-down region comprising the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge to at least the proximal end of the base portion of the second containment flap.

4. The absorbent article of claim **2**, wherein the distal portion of the waist containment member is coupled to the base portion of the first and second containment flaps.

5. The absorbent article of claim **3**, wherein the first lateral tack-down region and the second lateral tack-down region of the waist containment member are each disposed at least about 3.0 mm away from the lower lateral edge of the waist containment member when the absorbent article is in the stretched laid-flat configuration.

6. The absorbent article of claim **1**, wherein the waist containment member further comprises at least one elastic member in the intermediate portion of the waist containment member.

7. The absorbent article of claim **6**, wherein the waist containment member further comprises at least one elastic member in the distal portion of the waist containment member.

8. The absorbent article of claim **1**, wherein the waist containment member further comprises a second fold in the intermediate portion defining the lower lateral edge of the waist containment member.

9. The absorbent article of claim **1**, wherein the intermediate portion is thicker than the proximal portion of the waist containment member.

10. An absorbent article including a front waist region, a rear waist region, a crotch region, a longitudinal axis and a lateral axis, the absorbent article comprising:

a chassis including an absorbent body, the chassis including a body facing surface and a garment facing surface;

a pair of containment flaps coupled to the chassis including a first containment flap and a second containment flap, the first containment flap being on the first side of the longitudinal axis and the second containment flap being on the second side of the longitudinal axis, the first and second containment flap each comprising:

a base portion including a proximal end and a distal end, and

a projection portion configured to extend away from the body facing surface of the chassis in at least the crotch region when the absorbent article is in a relaxed configuration; and

a waist containment member disposed on the body facing surface of the chassis, the waist containment member comprising:

a first longitudinal side edge and a second longitudinal side edge, the first longitudinal side edge being disposed on a first side of the longitudinal axis and the second longitudinal edge being disposed on a second side of the longitudinal axis;

an upper lateral edge and a lower lateral edge, the first longitudinal side edge, the second longitudinal side edge, the upper lateral edge and the lower lateral edge of the waist containment member being defined when the absorbent article is in a stretched laid-flat configuration;

a proximal portion, the proximal portion being coupled to the body facing surface of the chassis;

a distal portion; and

a first lateral tack-down region and a second lateral tack-down region, the first lateral tack-down region including the distal portion of the waist containment member on the first side of the longitudinal axis being coupled to the body facing surface of the chassis from the first longitudinal side edge of the waist containment member to at least the proximal end of the base portion of the first containment flap and the second lateral tack-down region including the distal portion of the waist containment member on the second side of the longitudinal axis being coupled to the body facing surface of the chassis from the second longitudinal side edge of the waist containment member to at least the proximal end of the base portion of the second containment flap,

wherein the waist containment member is gathered in the longitudinal direction such that the waist containment member can extend away from the body facing surface of the chassis to provide a containment pocket for containing exudates between the first lateral tack-down region and the upper lateral edge of the waist containment member and between the second lateral tack-down region and the upper lateral edge of the waist containment member.

11. The absorbent article of claim **10**, wherein the waist containment member further comprises:

a first longitudinal tack-down region and a second longitudinal tack-down region, the first longitudinal tack-down region being disposed near the first longitudinal side edge of the waist containment member and the second longitudinal tack-down region being disposed near the second longitudinal side edge of the waist containment member.

12. The absorbent article of claim 10, wherein the distal portion of the waist containment member is gathered in the longitudinal direction to provide the void volume.

13. The absorbent article of claim 10, wherein the waist containment member further comprises an intermediate portion, the intermediate portion being disposed between the proximal portion and the distal portion, the intermediate portion being free to move independent of the proximal portion and the distal portion; the distal portion being gathered in the longitudinal direction by being disposed underneath the intermediate portion when the absorbent article is in the stretched laid-flat configuration.

14. The absorbent article of claim 13, wherein the first lateral tack-down and the second lateral tack-down are each disposed at least about 3.0 mm away from the lower lateral edge of the waist containment member to provide the void volume when the absorbent article is in the stretched laid-flat configuration.

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